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U. S. DEPARTMENT OF LABOR
JAMES J. DAVIS, Secretary
BUREAU OF LABOR STATISTICS
ETHELBERT STEWART, Commissioner

MONTHLY LABOR REVIEW

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SPECIAL FEATURES IN THIS ISSUE

Efficiency and wages in the United States

Coal situation in Illinois

Trend of occupations in the population

Experiment of protocolism in women's garment trades

Wages and hours of labor in metalliferous mines

Productivity of labor in Illinois coal mines

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THOMAS H. STEWART, Comptroller

MONTHLY LABOR REVIEW

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Efficiency and Wages in the United States

By JAMES J. DAVIS, UNITED STATES SECRETARY OF LABOR

ONE needs to visit other countries in order to realize just how big, how prosperous and how efficient the people of the United States really are.

We see at home so many instances of inefficiency, so many places where old methods still obtain, and we contrast the up-to-date plant with the plant which ought to have been scrapped 20 years ago, that sometimes we get impatient and sometimes we growl. But when we come back to the United States from abroad we appreciate that, all in all, we have a wonderful and efficient and up-to-date country and that even things we regard as back numbers here seem really wonderful methods or machines when compared with the best in other places.

The industrial economic genius of the American people has been shown and possibly more thoroughly tested in the last 10 years than ever before. The fact that we have grown and progressed while all other nations have been floundering, and most of them slumping and sliding back industrially, economically, and financially, is an evidence, yea, verily, a proof, that the American mind is geared to a mesh that drives it through any set of conditions.

Do you realize that in the field of manufacturing alone we produce more than \$60,000,000,000 worth of manufactured goods per year? In 1923 the value of manufactured products was precisely \$60,481,135,000, which represents an increase of $38\frac{1}{2}$ per cent over the production of 1921. While the money value shows some falling off as against 1919, yet in actual quantities produced there was an increase of 19 per cent in 1923 over the quantities produced in 1919. The number of persons engaged in manufacturing in 1923 was 10,176,750, and of these 8,763,233 were actual wage earners, an increase in wage earners of more than 26.2 per cent over 1921. The wage payments in 1923 were \$10,985,895,000, an increase of 34 per cent over 1921.

Now, the manufacturing establishment, of course, takes in a quantity of raw material and further fabricates, changes, or develops it into finished output. Much of the raw material is, in fact, the finished product of other manufacturing establishments, so that perhaps the best measure of what our manufacturing industries are really doing is the value added by manufacture; in other words, the difference between raw material as it goes into a given factory and the value of the finished product as it emerges from that factory.

Increase in Labor Efficiency

APPLYING this test we find that the value created over and above raw material cost in the manufacturing plants of the United States in 1923 was \$25,853,151,000, an increase of 41.1 per cent as compared with 1921, whereas the number of wage workers

increased but 26.2 per cent and the amount of wages paid increased 34 per cent. This brings us to the conclusion that labor is becoming more and more efficient and that the wages of labor are not, taking the country as a whole and everything into consideration, absorbing an unfair share of the country's increasing prosperity.

We hear enough and more than enough about the high wage rates and the terrible wages we have to pay for labor in the United States. We hear very little about labor cost in the finished product. We hear very little, entirely too little, of that marvel of modern times, the efficiency of the American laborer coupled with the machinery or equipment with which he toils.

That efficiency is increasing every year. I know it is a very common thing to refer to machine production as compared with hand production, as though the machine when once introduced had created a new and fixed standard of output per man. The question to-day is not one of the productivity of labor as between machine methods and hand methods but as between the machines of to-day and the machines of a year ago or two years ago.

We hear plenty about the increase in wages since the World War, the increase in wages of boot and shoe workers, for instance; but we are not always told that the output per man-hour has also tremendously increased.

For instance, in the same establishment in New England where, since 1916, wages have increased 48.5 per cent the efficiency of labor as measured in output per man-hour has increased 25.1 per cent. This increase in efficiency, acting as a shock absorber, has taken up a very perceptible amount of the wage increase. In that plant it required 1 hour and 42 minutes of one man's time to produce a pair of shoes in 1916. To-day it takes 54 minutes of one man's time. This has no doubt been accomplished by introduction of more effective machinery and by more efficient shop management. But I believe it will be good business policy all along the line, when improvements in machinery are made that enable a man to produce more output, to let that man share and share liberally in the gain that comes to production from such improved machinery.

Take another instance, the production of pig iron. I am not so much interested that away back in 1850 in the charcoal furnaces in which all the work was handwork the production per man was only 25 tons; but I am interested to know that in 1904 it was 470 tons and that in 1909 it was 671 tons and that in 1919 it was 811 tons, and that to-day it is 1,179 tons. I am interested to know that in 1919 we produced more tons of pig iron and employed fewer men in doing it than we did in 1909. In 1891 it required from 14 to 16 hours of one man's time to produce a long ton of pig iron. To-day in the eastern district it requires 2 hours and 18 minutes, while in Pittsburgh and Chicago it requires 1 hour and 54 minutes, and in the Southern and Gulf States it requires 4 hours and 30 minutes.

In textiles we are in an unfortunate situation at this time. The price of raw material, of cotton and wool in the raw, has reached a price level almost unheard of, and the tendency seems to be in some quarters to cut the pay roll to equalize, or partially equalize, this tremendous advance in raw material. We are told that the industry can not operate with the present rates of wages and the present cost of material. I would like to call attention to a statement, recently

published, to the effect that whereas three or four years ago weavers operated 4 to 6 looms, never more than 10, that they are now going back to these plants after a wage cut and are operating 36 looms. Up to a few years ago New England textile mills were winding their warp beams with about 50 pounds of cotton or wool, as the case might be. Later, these mills substituted beams ranging from 150 to 300 pounds, while to-day up-to-date plants with machinery for handling material are using beams from 600 to 1,000 pounds.

I think it will be agreed that labor cost can be met by a much simpler and more humane method than by reduction of wages of labor of men and women.

Wage Cuts Not Always Cost Cuts

THE brick manufacturers and the brickyard workers of Chicago have just entered into a new wage agreement providing for a 13 per cent increase in wages. There are instances in Chicago where a machine, tended by one man, shoots out 49,000 bricks an hour. Naturally, it does not make much difference how much wages they pay that man. His wages would have very little effect upon the labor cost of a thousand bricks.

Of course all brickyards are not so well equipped, but the question arises whether it would be better to improve the equipment and thus increase output and decrease labor cost rather than to resort to a reduction of wages; and I may say that reduction of wages does not always mean a reduction of labor cost even in the same plant and with the same equipment, because with lower wages a certain per cent of the more efficient workers who can get better wages elsewhere are driven out and their places filled with a less efficient class of labor, which increases the labor cost.

The records of the Bureau of Labor Statistics, for instance, show that in a plant where it required $13\frac{1}{2}$ hours, one-man time, to produce a thousand brick, the labor cost per thousand was greater, though this plant paid only 17 cents an hour, than it was in another plant which paid 79 cents an hour. Thirteen per cent increase in wages occurred in the plant paying 79 cents an hour, and the fellow who was paying 17 cents is looking for immigrants, Mexicans, with the result that his labor cost per thousand brick will probably be increased.

Increased efficiency should, in my mind, be the watchword of the American employer all along the line—increased efficiency rather than reduction in wage rates.

Wage Earners' Investments

I WANT to call attention to another tendency of the time, a tendency which can of course be not only checked but annihilated by a persistent and radical reduction in wages. I refer to the tendency of the wage-working masses to turn their savings back into industry and become the source of capital supply for business.

For some time past the railroads have been complaining that they found it difficult to secure loans to cover the cost of really needed development, improvements, and repairs. On February 7 the president of the New York Central Railroad lines, P. E. Crowley, an-

nounced that as a result of a three weeks' drive for stock subscriptions among the employees of the system 41,570 employees of the road had subscribed for stock and that the amount offered under the company's plan was oversubscribed by 176 per cent.

Let me call attention to the occupational list of stockholders of a certain group of telephone companies. I refer to the sale recently of preferred stock by the Bell Telephone Co. of Pennsylvania, the Wisconsin Telephone Co., and a part of the Southwestern Bell Telephone Co. There were 118,799 subscribers, who took 733,676 shares. Among these were 2,627 accountants, 527 barbers, 10,774 clerks, 21,626 housewives, 24,317 laborers, 1,043 members of the building trades, 4,101 stenographers, 468 tailors, 498 domestics, and so forth and so on.

Here, through the machinery of corporate stocks, is to be a source of capital for investment in the years to come. When we talk about the demands of the laborers for wages—and sometimes they are very unreasonable—as being an attempt to “kill the goose that lays the golden egg,” let me say that there is a way to protect the aforesaid goose. Let the wage earners of this country be once thoroughly convinced of corporate honesty, of corporate willingness to be fair and reasonable and just as between man and man, and the wage earners of this country will invest their savings in corporate stocks, preferred or common, and thus turn back into the business the money needed to conduct its affairs.

Now, as a part of being fair and just, managers of corporations should, in my judgment, do two things. First and foremost, let the wage worker have a full share in the increase of production that comes through improved machinery and factory equipment, always installing up-to-date methods to increase productive efficiency, rather than reduce wages; and, second, though this will be found to be a part of the first, gain the confidence of the workman; let him help to improve production methods.

I say without fear of contradiction that wherever the employee council has been given a fair trial it has worked out to the benefit of both the employer and employee. It has benefited business, it has improved the community.

The Russell Sage Foundation has just got out a report on the Dutchess Bleachery experiment which every man ought to read. I might cite the case of the Colorado Fuel & Iron Co. in its coal mines in Colorado. There certainly has been more peace and more employment and more coal under this arrangement than that locality ever knew before. I think the method might be greatly improved, but it is headed in the right direction.

I could cite scores of cases where the employees have been taken into the advisory councils of the management very much to the benefit of both. I would say to the manufacturer, give the worker a chance to see what you are doing, and give yourself a chance to see what he is thinking, especially what he is thinking about his work.

Industrial Overdevelopment

I REALIZE that with plenty of capital available from the savings of industry and with the rapid increase in the productive efficiency of labor which is going on all around us, we are heading toward

another trouble, which is already upon us in a most acute form in the bituminous coal fields, and that is the overdevelopment of industry. We are industrially a young, powerful people. We do things, and sometimes we overdo things. We have overdone the bituminous coal business.

Forty per cent of our coal mines employing 75 per cent of the workers now in the industry could, by employing them all the time, produce all the coal that we could use or sell.

With our present iron and steel equipment we can produce in seven months our needs for a year.

Our window-glass factories in 17 weeks can supply all that we can consume in a year.

The census of 1923 shows that there are 1,542 boot and shoe factories in the United States. Fourteen per cent of these do 65 per cent of the total business now, but if they operated to full capacity and full time this 14 per cent has the ability and the power to produce all the shoes required in the country. Aside from the plants constituting the 14 per cent, 47 per cent of the shoe manufacturers produce 32 per cent of the output, and these could with their present equipment increase their production 50 per cent. Thirty-eight per cent of the manufacturers of boots and shoes produce only $2\frac{1}{2}$ per cent of the total output, and these are the price cutters, the pests of the industry.

This question of overdevelopment is a serious problem. Out of it grows nine-tenths of our unemployment. From it flame up our booms, which precede our panics.

I started out by remarking what a great country this is industrially and economically. I would not recall one word of it, but our very greatness, our very strength, our very racial characteristics make it exceedingly important for us to watch our step, and guard against some of the pitfalls inherent in our very system and method of business. They make it necessary for us to get away from some of our inherited superstitions about master and servant, about the right to run our own business in our own way and do as we please with our own; make it necessary to protect not only our individualism but our citizenship, our social relations one with another; make it necessary to recognize the mass man and a mass interest, a community of mankind of which we are only a part and not the whole thing.

Coal Situation in Illinois

By ETHELBERT STEWART, UNITED STATES COMMISSIONER OF LABOR STATISTICS

THE bituminous coal situation in Illinois is essentially identical with that of every other bituminous coal State or group of States, and may be taken as a fair picture of the bituminous coal industry as a whole.

Illinois has 1,032 coal mines. Of these, 694, or more than two-thirds, are so-called local or wagon mines, shipping no coal whatever by railroad. It will, therefore, be seen that Illinois has a "snowbird" problem as great as any other State in the Union. As a comment upon the term "snowbird," applied to local coal mines and supposed to signify that they operate only in the winter time, it may be said that the average running time of the local mines in Illinois for the year ending June 30, 1924, was 140 days, whereas the shipping mines averaged 139 days. A number of serious-minded men have questioned whether the local mine in the various bituminous coal States constitutes as serious a problem as it is represented to be. These mines are scattered all over the State wherever coal is found. They are usually drift or slope mines, in which the coal is mined by hand. There is neither motor nor mule in any of these mines, the coal being pushed on pit cars by hand either to the mouth of the opening or to the base of the shaft. In these local mines an average of 3,640 underground and 626 surface workers are employed, or a total of 4,266 employees. However, of the 72,308,665 short tons of coal produced in Illinois during the year ending June 30, 1924, as shown in the Illinois coal report,¹ these local mines produced only 1,984,302 tons, 1,739,482 tons of which were sold to the local trade, while the remainder was used at the mines. The production of the local mines is therefore insignificant. They supply a purely local trade that can be reached by wagon. None of their output reaches the great competitive centers, and its interference with trade can be with domestic trade alone.

The 338 shipping mines sold 1,609,980 tons of their output to the same sort of local trade, or an amount almost equal to that sold by all of the local mines combined. It would seem, therefore, that the local mine question might well be eliminated from the entire discussion of bituminous coal troubles and that those writers are correct who claim that its introduction simply confuses the issue without having any intrinsic significance. In the following discussion of the Illinois coal situation, therefore, we will eliminate the local mines and discuss only the 338 mines of the State which ship coal.

In the period under discussion these shipping mines produced more than 70,000,000 tons, of which 44,242,533 tons were shipped by railroad to points more or less distant from the mine and presumably to competitive markets.

Operating Time

AS STATED above, these 338 mines were in operation an average of 139 days during 1923-24, and it is here that the trouble begins when one endeavors to get a real picture of the situation.

¹ Illinois. Department of mines and minerals. Forty-third annual coal report, 1924, Springfield, 1924.

This average is a figure which conceals all the facts that are worth knowing about the running time of coal mines in Illinois. In the first place, the running time as reported is the tipple time or the days upon which the mine actually loads coal for shipment. Formerly it was the custom for companies to include as a full day of operation each day upon which the tipple worked at all. For instance, if, in a mine capable of filling 100 railroad cars per day, only 5 cars could be obtained and the tipple worked only long enough to fill these 5, this time was reported as a day of operation.

Very strenuous efforts have been made by the United States Geological Survey and the various State bureaus to get away from this loose method of reporting and to have the tipple time reported on a full-time basis. No doubt great improvement in this regard has been made, but there still remains a good deal of inaccuracy about the reporting of tipple time. At best, reports of tipple time give little indication as to whether the mine itself was at work, as they do not show what percentage of the miners were mining coal at the time or whether any of them were at work. The tipple can be operated, so long as there is coal in the pit cars in the mine, even though no actual production is going on.

To obtain the average of 139 days' operation for the shipping mines in Illinois the total days reported by the 338 mines, regardless of their size, were simply added and divided by 338. In other words, the figures for the mine that runs 30 days and produces the minimum produced by any shipping mine are combined with and given the same weight as those for the mine that runs 275 days and produces a million tons. As is too often the case, the average here is worse than meaningless; it is vicious. Fortunately, the Illinois Department of Mines presents in its report an array of details that permits recasting of the entire report to show what really lies behind this simple average. This has been done in the following table, which classifies the mines by days of operation and also shows the amount and per cent of production, and the number and per cent of employees by mines so classified.

TABLE 1.—NUMBER AND PER CENT OF EMPLOYEES AND OF TONS PRODUCED IN ILLINOIS COAL MINES IN OPERATION EACH CLASSIFIED NUMBER OF DAYS DURING 1923-24

Days of operation	Mines			Employees				Production			Average number of days worked (weighted)	Average production per man per day	Number of men necessary at 300 days per year
	Number	Per cent	Cumulative per cent	Number	Per cent	Cumulative per cent	Average number per mine	Amount (tons)	Per cent	Cumulative per cent			
Under 10 days.....	1	0.3	0.3	34	0.04	0.04	34	3,800	0.01	0.01	9.0	12.4	1
10 and under 20 days..	4	1.2	1.5	489	.5	.5	122	23,198	.03	.04	18.0	2.6	29
20 and under 30 days..	6	1.8	3.3	1,596	1.7	2.2	266	167,511	.2	.2	25.3	4.2	134
30 and under 40 days..	8	2.4	5.7	1,821	1.9	4.1	228	373,319	.5	.7	35.2	5.8	214
40 and under 50 days..	10	3.0	8.7	2,284	2.4	6.5	228	458,773	.7	1.4	42.6	4.7	324
50 and under 60 days..	6	1.8	10.5	1,059	1.1	7.6	177	271,698	.4	1.8	53.7	4.8	190
60 and under 70 days..	14	4.1	14.6	1,975	2.1	9.7	141	722,196	1.0	2.8	63.6	5.7	419
70 and under 80 days..	16	4.7	19.3	3,705	3.9	13.6	232	1,320,475	1.9	4.7	76.1	4.7	940
80 and under 90 days..	15	4.4	23.7	3,985	4.2	17.8	266	1,838,458	2.6	7.3	84.7	5.4	1,125
90 and under 100 days	14	4.1	27.8	2,933	3.1	20.9	210	1,368,390	1.9	9.2	95.3	4.9	932
100 and under 110 days.....	18	5.3	33.1	6,323	6.6	27.5	351	3,818,439	5.4	14.6	103.9	5.8	2,191
110 and under 120 days.....	16	4.7	37.8	3,628	3.8	31.3	227	2,332,576	3.3	17.9	114.5	5.6	1,385

TABLE 1.—NUMBER AND PER CENT OF EMPLOYEES AND OF TONS PRODUCED IN ILLINOIS COAL MINES IN OPERATION EACH CLASSIFIED NUMBER OF DAYS DURING 1923-24—Continued

Days of operation	Mines			Employees				Production			Average number of days worked (weighted)	Average production per man per day	Number of men necessary at 300 days per year
	Number	Per cent	Cumulative per cent	Number	Per cent	Cumulative per cent	Average number per mine	Amount (tons)	Per cent	Cumulative per cent			
120 and under 130 days	23	6.8	44.6	7,264	7.6	38.9	316	5,058,184	7.2	25.1	125.3	5.6	3,030
130 and under 140 days	24	7.1	51.7	5,448	5.7	44.6	227	3,623,475	5.2	30.3	134.7	4.9	2,467
140 and under 150 days	14	4.1	55.8	4,952	5.2	49.8	354	4,019,329	5.7	36.0	143.4	5.7	2,367
150 and under 160 days	18	5.3	61.1	3,431	3.6	53.4	191	2,632,180	3.7	39.7	154.3	5.0	1,760
160 and under 170 days	22	6.5	67.6	7,333	7.7	61.1	333	5,803,114	8.3	48.0	165.1	4.8	4,030
170 and under 180 days	12	3.6	71.2	3,096	3.2	64.3	253	2,460,660	3.5	51.5	173.3	4.6	1,730
180 and under 190 days	15	4.4	75.6	5,586	5.8	70.1	372	5,601,797	8.0	59.5	184.0	5.4	3,420
190 and under 200 days	21	6.2	81.8	6,697	7.0	77.1	319	7,010,961	10.0	69.5	194.2	5.4	4,430
200 and under 210 days	17	5.0	86.8	6,566	6.9	84.0	386	6,229,817	8.9	78.4	204.6	4.6	4,470
210 and under 220 days	10	3.0	89.8	3,713	3.9	87.9	371	3,053,392	4.3	82.7	213.4	3.9	2,640
220 and under 230 days	10	3.0	92.8	4,917	5.1	93.0	492	5,154,493	7.3	90.0	223.9	4.7	3,670
230 and under 240 days	10	3.0	95.8	3,261	3.4	96.4	326	3,698,267	5.3	95.3	235.0	4.8	2,550
240 and under 250 days	5	1.5	97.3	1,108	1.2	97.6	222	856,879	1.2	96.5	244.8	3.2	900
250 and under 260 days	2	.6	97.9	273	.3	97.9	137	341,233	.5	97.0	257.0	4.9	230
260 and under 270 days	6	1.8	99.7	1,602	1.7	99.6	267	1,610,842	2.3	99.3	264.5	3.8	1,410
270 days and over	1	.3	100.0	420	.4	100.0	420	474,916	.7	100.0	282.0	4.0	330
Total	338	100.0		95,499	100.0		283	70,328,372	100.0		148.8	4.9	47,370

By looking at the cumulative percentage column of this table, it will be seen that more than 10 per cent of the shipping mines operated less than 60 days; that 5.7 per cent operated less than 40 days; that 51.7 per cent of the mines of Illinois operated less than the average number of days as shown in the Illinois coal report (139 days); that these mines operating less than the average employed 44.6 per cent of the employees, and produced 30.3 per cent of the total output.

The average number of days worked as shown in this table is a weighted average, weighted by the number of employees, and not a simple arithmetical average of mines reporting as shown in the Illinois report. The weighted average days worked is nearer 148.8 than 139. Even this weighted average is open to some objection because of the faulty way of reporting the number of employees, as will be shown.

Output

THE relationship between operating days and tons produced is shown in the following table of classification by output:

TABLE 2.—NUMBER AND PER CENT OF EMPLOYEES AND OF TONS PRODUCED IN ILLINOIS COAL MINES, CLASSIFIED BY OUTPUT

Classified production (tons)	Mines			Employees				Production			Average number of days worked (weighted)	Average production per man per day	Number of men necessary at 300 days per year
	Number	Per cent	Cumulative per cent	Number	Per cent	Cumulative per cent	Average number per mine	Amount (tons)	Per cent	Cumulative per cent			
Under 10,000.....	20	5.9	5.9	834	0.9	0.9	42	112,236	0.2	0.2	45.6	2.9	127
10,000 to 24,999.....	36	10.7	16.6	2,437	2.6	3.5	68	639,084	.9	1.1	74.2	3.5	603
25,000 to 49,999.....	34	10.1	26.7	4,054	4.2	7.7	119	1,240,854	1.8	2.9	84.9	3.6	1,147
50,000 to 99,999.....	57	16.9	43.6	10,690	11.2	18.9	188	4,216,960	6.0	8.9	98.3	4.0	3,502
100,000 to 149,999.....	47	13.9	57.5	9,268	9.7	28.6	197	5,758,165	8.2	17.1	129.2	4.8	3,991
150,000 to 199,999.....	22	6.5	64.0	5,081	5.3	33.9	231	3,873,391	5.5	22.6	152.0	5.0	2,574
200,000 to 249,999.....	22	6.5	70.5	7,267	7.6	41.5	330	4,892,047	7.0	29.6	150.3	4.5	3,642
250,000 to 299,999.....	16	4.7	75.2	6,662	7.0	48.5	416	4,462,506	6.3	35.9	147.2	4.6	3,269
300,000 to 399,999.....	28	8.3	83.5	12,802	13.4	61.9	457	9,860,844	14.0	49.9	150.2	5.1	6,409
400,000 to 499,999.....	17	5.0	88.5	8,813	9.2	71.1	518	7,615,240	10.8	60.7	175.4	4.9	5,152
500,000 to 599,999.....	16	4.7	93.2	9,773	10.2	81.3	611	8,750,789	12.4	73.1	158.7	5.6	5,171
600,000 to 699,999.....	5	1.5	94.7	3,042	3.2	84.5	608	3,191,905	4.5	77.6	215.6	4.9	2,186
700,000 to 799,999.....	7	2.1	96.8	5,120	5.4	89.9	731	5,198,264	7.4	85.0	200.2	5.1	3,417
800,000 to 899,999.....	5	1.5	98.3	3,635	3.8	93.7	727	4,274,335	6.1	91.1	197.6	6.0	2,394
900,000 and over.....	6	1.8	100.1	6,021	6.3	100.0	1,004	6,241,761	8.9	100.0	188.7	5.5	3,786
Total.....	338	100.0	-----	95,499	100.0	-----	283	70,328,372	100.0	-----	148.8	4.9	47,371

It will be seen from the above table that 57.5 per cent of the mines each produced less than 150,000 tons; that these employed 28.6 per cent of the employees and produced but 17.1 per cent of the coal; and that it took 83.5 per cent of the mines, employing 61.9 per cent of the workmen, to produce half, or slightly less than half, of the coal produced.

The following table shows the number of mines which, operating all time, or 300 days a year, could produce all the coal that all of the mines in the State did produce.

TABLE 3.—NUMBER OF MINES AND NUMBER OF EMPLOYEES THAT, WORKING 300 DAYS IN THE YEAR, WOULD BE REQUIRED TO PRODUCE AN AMOUNT OF COAL EQUAL TO THAT PRODUCED BY 338 MINES IN THE YEAR 1924

Classified production of 1924	Mines			Employees			Production per man per day (tons)	Possible total production on 300-day basis	Cumulative total production
	Number	Per cent	Cumulative per cent	Number	Per cent	Cumulative per cent			
900,000 tons and over.....	6	1.8	1.8	6,021	6.3	6.3	5.5	9,934,650	9,934,650
800,000 and under 900,000 tons.....	5	1.5	3.3	3,635	3.8	10.1	6.0	6,543,000	16,477,650
700,000 and under 800,000 tons.....	7	2.1	5.4	5,120	5.4	15.5	5.1	7,833,600	24,311,250
600,000 and under 700,000 tons.....	5	1.5	6.9	3,042	3.2	18.7	4.9	4,471,740	28,782,990
500,000 and under 600,000 tons.....	16	4.7	11.6	9,773	10.2	28.9	5.6	16,418,640	45,201,630
400,000 and under 500,000 tons.....	17	5.0	16.6	8,813	9.2	38.1	4.9	12,955,110	58,156,740
300,000 and under 400,000 tons.....	28	8.3	24.9	12,802	13.4	51.5	5.1	19,587,060	77,743,800
Total.....	84	24.9	-----	49,206	51.5	-----	-----	-----	-----

It will be noted that the mines are given the capacity indicated by their output in 1924. That is to say, upon the assumption that the six mines producing 900,000 tons and over in 1924 could not have produced any more coal than they did in the days upon which they operated, that the 16 mines that produced between 500,000 and 600,000 tons each could not have produced any more coal than they did, etc., we have in this table simply increased the production to the 300-day basis, using the 1924 rate of production per man per day, with the remarkable result that the table shows that 84 of the 338 shipping mines of Illinois, or 24.9 per cent of the mines, employing 49,206 workmen, or 51.5 per cent of the total employed, could have produced 77,743,800 tons of coal, which is 7,000,000 tons more than all of the shipping mines did produce, and 5,000,000 tons more than both shipping and local mines produced in 1924. This means that 254 of the 338 principal mines in the State represent an unnecessary expenditure of money so far as the capital invested in the mines themselves is concerned; that they simply prevent an adequate number of mines from producing an adequate amount of coal on a reasonably efficient basis; that the railroads must distribute cars to 254 unnecessary mines in a single State, with all the capital invested in cars that this implies. It means that the industry wastes not only the money actually invested but the time and energy of the officials and clerical help that must be on hand the year round, even when not producing unnecessary coal.

Another problem in this industry, whose principal product is problems, enters fully into the Illinois situation. The railroad mine and, more recently, the "consumers' mines" of all kinds must be reckoned with. For many years the railroads have owned and operated their own mines or contracted for a large percentage of the output of mines which were not directly owned, and in the more recent years the iron and steel interests have secured control of mines from which they supply themselves with coal. Other industries are rapidly doing the same thing. To the extent that this is true, here is a market from which the operator of a commercial coal mine is as completely shut out as though no coal were being consumed. The railroads are the greatest consumers of bituminous coal; the iron and steel industry is probably the next greatest, and yet the extent to which these two principal consumers replenish their stocks from mines uncontrolled or uninfluenced by them is very small. Of the coal produced in the shipping mines of Illinois in 1924, 22,402,214 tons, or 31.9 per cent, went to railroad companies direct from the mine, and if we take the mines that operated the greatest number of days we find their output going exclusively to railroads. The only mine operating 280 days and over was a 100 per cent railroad mine. Below is a table covering the 27 Illinois mines that operated 200 days or more, showing their total production and the tons sold to railroad companies or loaded onto the railroad locomotives, which amounts to the same thing. It will be seen that 73.8 per cent of the output of these mines, as against 31.9 per cent of the total coal produced in all the shipping mines of the State, went to the railroads.

TABLE 4.—PER CENT OF TOTAL PRODUCTION SOLD TO RAILROADS BY THE 27 MINES OPERATING 200 DAYS AND OVER

Days of operation	Num- ber of em- ploy- ees	Production		
		Tons mined	Tons sold to railroads	Per cent sold to railroads
280 days and over.....	420	474, 916	474, 916	100. 0
260 and under 270 days.....	48	120, 000	120, 000	100. 0
	51	105, 000	105, 000	100. 0
	480	437, 678	163, 029	37. 2
	559	604, 992	391, 744	64. 8
250 and under 260 days.....	143	162, 249	160, 030	98. 6
	130	178, 984	93, 281	52. 1
240 and under 250 days.....	163	125, 371	61, 635	49. 2
	182	171, 082	94, 472	55. 2
	399	213, 923	197, 694	92. 4
230 and under 240 days.....	52	163, 303	76, 099	46. 6
	306	277, 737	116, 270	41. 9
	488	580, 454	455, 015	78. 4
	792	728, 986	424, 212	58. 2
220 and under 230 days.....	578	295, 069	280, 230	95. 0
	406	447, 396	208, 037	46. 5
210 and under 220 days.....	217	285, 523	251, 071	87. 9
	496	449, 748	342, 687	76. 2
	594	412, 959	198, 703	48. 1
	418	461, 188	363, 822	78. 9
	816	730, 118	709, 161	97. 1
	106	66, 010	42, 550	64. 5
200 and under 210 days.....	184	114, 353	54, 322	47. 5
	72	130, 297	80, 991	62. 2
	565	221, 870	192, 014	86. 5
	262	305, 348	290, 242	95. 1
	571	666, 055	643, 576	96. 6
Total.....	9, 498	8, 930, 609	6, 590, 803	73. 8

The advantage which a consumer's mine has over a strictly commercial mine is readily understood. When prices are low the consumer operates the mine only long enough to supply himself with coal, and he keeps his stock of coal in the ground unmined and unwasted and treats his coal mine exactly as he would a department of his steel plant or of his railroad. He reduces the number of his employees and cuts down the production of the mine to the exact tonnage that he needs. Hence he loses nothing, or practically nothing, by price slumps. However, when prices go up he can take on more men and produce commercial coal as long as it pays him to do so. On the other hand, the commercial mine must sell coal or close down. As consumers' mines increase, either in number or capacity, the excluded markets increase and the outlet for truly commercial coal is restricted.

When we say that we use 500,000,000 tons of coal in the United States we are creating a false impression, if by that statement we convey the idea that there is a market for any such amount of coal. Considerably more than half of this consumption is not "demand" in the market sense of the word, but is a demand that is already supplied by the very terms of the ownership and operation of the production. Perhaps if this phase of the situation were better understood there would not be such a continuous increase in the number of coal mines.

Number of Employees

TAKING up now the labor statistics of coal mines, we find the situation to be even worse. The occupational classification of 95,499 persons employed in shipping-coal mines in Illinois, as shown by the 1924 report, is as follows:

Underground:	Number	Surface:	Number
Cagers.....	576	Blacksmiths.....	516
Drivers.....	603	Blacksmiths' helpers.....	246
Boss drivers.....	184	Carpenters.....	457
Electricians and helpers.....	859	Hoisting engineers.....	607
Mine examiners.....	592	Other engineers.....	178
Mine managers.....	702	Firemen.....	664
Machine miners.....	37,601	Top foremen.....	263
Pick miners.....	20,619	Machinists and helpers.....	270
Motormen and assistants.....	3,088	Superintendents.....	237
Machine helpers.....	2,464	Stablemen, top.....	129
Machine runners.....	2,695	Watchmen.....	158
Pumpmen and pipemen.....	366	Weighmen.....	370
Shot firers.....	683	Office employees at mine.....	628
Shot firers' runners.....	75	Others on surface.....	4,723
Spraggers.....	546		
Stablemen.....	172	Total on surface.....	9,637
Timbermen.....	1,890		
Trackmen and brattice- men.....	3,450	Grand total.....	95,499
Trappers.....	971		
Others underground.....	4,726		
Total underground.....	85,862		

These figures are secured by requesting each company in the State to divide the total number in each occupation on all pay rolls by the number of pay rolls. It will be readily seen that by this method the labor turnover is duplicated over and over again.

As shown in Table 1, 5.7 per cent of the mines in Illinois worked less than 40 days, and these mines employed or had on their pay roll at some time during the 40 days 4.1 per cent of the average total number alleged to have been employed. It is fairly safe to assume that these miners go from the mines that are not working to the mines that are in operation and are thus counted again and again.

To the average number employed in the shipping mines we must add the 4,266 employees of the local mines to arrive at the total shown in the report—99,765 employees for all mines said to have been "working an average of 140 days." It is apparent that this figure not only includes the ordinary labor turnover that occurs in the very best of mines but is the turnover plus the floating from mine to mine in cases of shutdown. In other words, there is actually no such number of individuals employed in the bituminous coal industry of Illinois, and it is impossible to determine from these figures the exact number of persons so employed.² And perhaps here is the place to say that the figures from the coal fields of Illinois published by the department of mines and minerals in that State are the best obtainable from any State or from any source.

As stated above, there is no actual record of men at work, so far as tonnage men or actual coal miners are concerned. The only record is that of brass checks attached to pit cars, and these give no indica-

²The United Mine Workers' total membership in Illinois is approximately 90,000.

tion as to the time actually spent by the miner at the face of the working. And since the days in operation reported mean simply the tippie time, and as the tippie is only one part of a mine and has nothing to do with the actual production of coal, we find ourselves in a sea of figures with no statistics in sight.

Conclusion

THE only figure to be found in all the mass of numerals connected with the bituminous coal industry that is clear cut and means what it says without equivocation or evasion is the number of tons of coal produced. In an industry admittedly sick, and sick almost unto death, with accurate statistics as the only means by which the disease can be diagnosed or any intelligent remedy applied, it is exceedingly unfortunate that the responsible managers of the industry have not seen their way clear to furnish intelligent statistical data for the industry.

If the records could be kept to show the number of man-hours of work performed at the face of the working—that is to say, in getting the coal, which is the real point to the industry, instead of the number of days upon which the tippie works, which has nothing to do with the industry except to perform one minor point of loading the coal into railroad cars; if we had an accurate record of the number of men required to operate the mine, eliminating the number put upon the pay roll to increase the car rating, which is purely a railroad scheme and has nothing to do with coal mining;¹ if the actual coal production could be separated from the work of extending the entries and drive-ways farther into the coal seams, which is a capital outlay and not a current production cost; if, in addition to this, accurate records of labor turnover could show the real extent of the floating and drifting of the men—then a picture might be drawn by competent statisticians that would be of untold value to the industry and to the public.

It is not to be wondered at that coal operators grow weary of furnishing figures which get nobody anywhere and only result in such absurd statements as those sometimes made, showing an impossible percentage of the workers who work but a few days in the year, utterly ignoring the element of labor turnover and drifting from mine to mine, and which simply mean that there was an enormous number of persons whose names were on the pay roll of any given company for a very short time, with nothing to indicate on how many other pay rolls they figured during the year.

Another form of coal figures that have no relation to essential facts has been those showing fatal accidents in terms of tons of coal produced. Here again the Illinois report is far better than most of our sources of information, as it does give the fatalities per thousand employees, though without regard to the length of time the thousand persons were employed. The United States Bureau of Mines, realizing that it is the man who gets hurt and not the coal, has recently arranged with certain coal companies to report their accidents in relation to the actual one-man hours employed in the mine. The bureau has not as yet published these returns.

¹ See MONTHLY LABOR REVIEW for February, 1921, p. 4.

Trend of Occupations in the Population

By M. Z. JONES, OF THE UNITED STATES BUREAU OF LABOR STATISTICS

FOR a great many years the idea has prevailed among a large number of people that the increase in the skilled trades in the United States is not keeping pace with the increase in population. This primarily includes the trades which were and still are hand trades, but it is further contended that the modern automatic machine has been developed to a point where it is replacing to a large extent the skilled craftsman of 50 or 75 years ago. It is true that some of the skilled trades of 1850 either no longer exist or are fast disappearing, due to the changes in the customs and desires of the people, as well as to the introduction of machinery. Others, however, have expanded and new trades have arisen in many cases to take the place of those no longer needed. Also a large part of the machinery used in manufacturing establishments is not entirely automatic and requires operators who, in many cases, are more skilled than were the hand employees whom the machines replaced.

The information upon which the present study is based was compiled from the decennial reports of the occupational census of all persons 10 years of age and over in the United States. The purpose has been to assemble all the reasonably comparable data available covering significant occupations, both skilled and unskilled, and to present the figures in sufficient detail for further analysis.

The first attempt to classify the people of the United States by occupations was made in 1850. While some occupational data had been accumulated for years as far back as 1820, it had quite generally been thought that not much could be made of statistics of this sort and consequently little effort was made to use them. Growing interest in social and industrial problems, however, brought about the classification of 1850. While some mistakes were made in this first attempt, as is usually the case in pioneer work of any sort, the importance of a reliable occupational census was demonstrated. Unfortunately the occupations of males alone were published in 1850 and apparently no inquiry was made as to the occupations of the female members of the family. The number of male and female wage earners was shown separately, however, in the manufacturing census of 1850. These occupational statistics have since become an important part of each population census and are available for each 10-year period from 1850 to 1920. The occupations of women were reported, as well as those of the men, for 1860 and each succeeding census.

Before entering into any discussion of the material presented, attention must be called to the fact that many of the trades or occupations of the present day are not strictly comparable with the same trade or occupation in 1850. New tools, new methods, different products, all tend to change the trade as well as the number employed in it. For example, the carpenter of the present day uses many tools similar to those which were in use in 1850, but he no longer makes his own window frames, doors, and door sash, etc. These are now almost all made in factories. For the purposes of this study, however, occupations of the same name have been assumed to be comparable. Also, it should be stated that these figures should be accepted only as representative of the general trend of the occupations and not as absolutely

accurate measurements of the number of people employed in any occupation. The difficulties of enumeration are greater for occupation statistics than for almost any other statistics gathered by the Census Office, part of this being due to the great complexity of modern industrial establishments and processes. Also it must be remembered that these statistics are taken at 10-year intervals and many changes take place between censuses. The relative importance of occupations is continually changing, and unfortunately the occupations have not received the same treatment in each decennial census report. Different occupational terms and combinations thereof are used, and some occupations, which are shown separately for a few years, have drifted into the "all other" group in other years, rendering comparison impossible. Another thing which should be remembered is that the census for any year is taken as of one day in that year and the same date has not always been used. During the years 1850 to 1900 it was the custom to take the census as of June 1, but in 1910 April 15 was chosen. The date of January 1 was used in 1920. These changes in census dates affect the comparisons to some extent in the more or less seasonal occupations.

The occupations for which figures are presented below have been arranged under seven industrial groups. Figures are shown for each occupation for each census period for which fairly comparable information is available. It was not possible to include all of the occupations reported by the census, as in many cases they are of no particular significance in any year and also many of them could not be traced on a comparable basis through the various reports. The occupational terms used in the table are mostly general ones designed to cover the material for all years, although they may not be the exact terms used in any census report. Wherever necessary, combinations have been made in order to maintain the comparison from year to year.

While employees in most of the trades have increased in actual numbers from one census period to another, when compared with the changes in population many of them show relative decreases. The population increased from 23,191,876 in 1850 to 105,710,620 in 1920, and it is only by considering the changes in the occupations with relation to this increase in population that the real significance of the changes become apparent. The table below shows the number of employees per million of population.

NUMBER OF EMPLOYEES PER MILLION OF POPULATION, ENGAGED IN VARIOUS TRADES AND OCCUPATIONS, AS SHOWN BY THE OCCUPATIONAL CENSUS FOR EACH 10-YEAR PERIOD, 1850 TO 1920

Occupation	Number of workers per million of population in—							
	1850	1860	1870	1880	1890	1900	1910	1920
<i>Agriculture, forestry, and animal husbandry</i>								
Agricultural laborers.....		25,305	74,848	60,271	47,723	57,449	65,047	37,544
Farmers and planters.....	103,097	79,809	77,320	84,318	83,904	74,606	64,231	57,550
Fishermen and oystermen.....	486	844	703	825	956	907	742	500
Gardeners, nurserymen, florists, vine growers, etc.....	366	697	872	1,117	1,153	1,406	3,015	2,955
Lumbermen, raftsmen, wood choppers, etc.....	491	614	651	865	1,582	1,422	1,753	1,826
Stock raisers, drovers, herders, etc.....	105	318	396	879	1,124	1,118	1,256	1,271
<i>Extraction of minerals</i>								
Quarry operatives.....	83	131	352	302	598	455	879	427
Miners, coal and metalliferous.....	3,338	4,699	3,945	4,670	5,554	6,959	8,758	8,351
Oil and gas well operatives.....			99	146	145	237	278	809

NUMBER OF EMPLOYEES PER MILLION OF POPULATION, ENGAGED IN VARIOUS TRADES AND OCCUPATIONS, AS SHOWN BY THE OCCUPATIONAL CENSUS FOR EACH 10-YEAR PERIOD, 1850 TO 1920—Continued

Occupation	Number of workers per million of population in—							
	1850	1860	1870	1880	1890	1900	1910	1920
<i>Manufacturing and mechanical industries</i>								
Apprentices.....	80	1,760	451	881	1,310	1,072	1,294	1,364
Bakers.....	615	604	718	823	950	1,042	974	927
Blacksmiths.....	4,308	3,587	3,677	3,444	3,262	2,869	2,533	1,847
Boiler makers.....	68	105	180	255	339	410	487	701
Brick and stone masons.....	2,733	2,011	2,327	2,043	2,525	1,962	1,842	1,314
Plasterers.....		417	612	440	620	465	518	362
Boot and shoe workers.....	5,644	5,348	4,438	3,870	3,392	2,741	2,836	2,879
Cabinetmakers.....	1,611	1,131	1,111	1,010	571	469	456	431
Carpenters and joiners.....	8,509	7,992	8,937	8,440	9,714	7,693	8,884	8,394
Coopers.....	1,884	1,397	1,064	980	754	490	275	180
Electricians.....						667	1,307	2,014
Engravers.....	95	88	110	91	132	147	152	142
Glassworks operatives.....	140	111	247	358	645	658	892	784
Harness and saddle workers.....	982	814	851	797	691	528	246	180
Iron and steel workers, including blast furnace, rolling-mill, foundry, etc., employees.....	528	800	1,215	2,284	3,355	3,919	8,052	8,006
Laborers, general.....	39,229	30,827	26,756	37,069	30,396	30,069	29,872	28,829
Machinists.....	1,039	1,394	1,420	2,016	2,813	3,508	5,016	7,596
Marble and stone cutters.....	607	631	670	655	970	717	389	209
Millers and mill workers (grain, flour, and feed).....	1,199	1,186	1,078	1,066	839	534	396	468
Painters, glaziers, and varnishers.....	1,215	1,659	2,208	2,563	3,494	3,632	3,635	3,017
Paper and pulp mill operatives.....	128	146	323	427	442	478	737	1,012
Paper hangers.....		64	65	100	197	287	278	177
Upholsterers.....	112	102	149	208	408	406	220	280
Pattern and model makers.....	63	87	103	116	164	198	256	262
Plumbers, gas and steam fitters.....	81	191	289	387	899	1,214	1,613	1,956
Potters and pottery workers.....	179	110	131	144	237	212	277	277
Printers, compositors, pressmen, lithographers, bookbinders, etc.....	788	944	1,285	1,726	2,260	2,394	2,552	2,339
Roofers and slaters.....	19	62	71	80	112	118	153	108
Rubber factory operatives.....	7	15	101	127	257	288	477	1,302
Steam engineers and firemen (stationary).....	510	(¹)	888	1,588	2,220	2,941	3,722	3,651
Structural-iron workers, building.....							124	178
Tailors, tailoresses, seamstresses, dressmakers, milliners, etc.....	(¹)	8,045	6,585	8,357	10,884	10,652	10,712	6,662
Tanners, curriers, and tannery workers.....	646	446	744	505	625	561	591	565
Textile workers.....	1,925	1,686	4,842	6,015	5,442	7,087	8,162	9,097
Tinsmiths and tinware workers and coppersmiths.....	582	615	847	920	935	925	848	1,059
Tobacco and cigar factory operatives.....	467	681	1,044	1,536	1,773	1,730	1,826	1,706
Wagon and coach makers.....	673	618	1,101	995	549	(¹)	376	182
Wheelwrights.....	1,323	1,040	543	311	204	178	41	35
<i>Transportation</i>								
Chauffeurs.....							498	2,697
Draymen, hackmen, teamsters, drivers, etc.....	1,757	2,468	3,132	3,541	5,854	7,092	4,826	3,975
Conductors, brakemen, and other railroad employees (not clerks).....	208	1,163	3,995	4,707	6,080	6,714	11,378	10,914
Locomotive engineers and firemen.....					1,104	1,400	1,877	1,904
Motormen, conductors, and other street railway employees (not clerks).....			132	238	593	920	1,667	1,634
Sailors and deck hands.....	3,044	2,142	1,470	1,198	888	795	506	519
<i>Professional service</i>								
Architects.....	26	40	52	67	128	139	181	172
Chemists, assayers, and metallurgists.....	20	20	20	39	72	116	177	312
Clergymen.....	1,157	1,194	1,138	1,290	1,401	1,469	1,283	1,204
Photographers and daguerreotypists.....	40	100	196	199	318	355	346	324
Dentists.....	126	178	203	246	278	390	435	531
Lawyers, judges, and justices.....	1,032	1,081	1,057	1,279	1,424	1,506	1,247	1,159
Physicians and surgeons.....	1,757	1,751	1,618	1,708	1,665	1,737	1,643	1,372
<i>Domestic and personal service</i>								
Barbers, hairdressers, and manicurists.....	250	354	621	804	1,350	1,725	2,123	2,045
Servants, housekeepers, stewards, stewardesses, etc.....	(¹)	18,696	25,337	21,492	23,111	22,579	20,113	16,285
<i>Clerical occupations</i>								
Clerks, stenographers, typewriters, bookkeepers, accountants, etc.....	4,369	5,933	1,926	2,990	16,117	20,793	16,569	26,691
Clerks and salesmen and saleswomen in stores.....			6,139	7,691			13,748	14,565

¹ Includes a few whitesmiths.

² Estimated by Bureau of Census in 1920.

³ Reported under another designation.

⁴ Not shown, as males only were reported.

⁵ Including spinners, weavers, warpers, loom fixers, scourers, bleachers, dyers, knitters, etc., of cotton, wool, worsted, silk, linen, and hosiery.

⁶ Includes sheet-metal workers.

The table shows that building trades have undergone a considerable change since 1850. This is not surprising when we stop to think how vastly different the buildings of to-day are from those of 75 years ago. In the early days lumber was the easiest as well as the cheapest material to get with which to build, and as a result most buildings were made of wood. To-day, however, almost all of our large buildings are constructed with brick, concrete, steel, and, to some extent, stone, with probably an inside finish of wood. These materials are also growing in favor among home builders, especially in the larger cities. The use of steel for framing has accounted for the new trade of structural-iron worker. This was shown separately for the first time in the census return for 1910 when 124 workers per million of population were reported in this trade. They had increased to 178 per million in 1920.

The bathroom, a luxury enjoyed by few families in 1850, has become almost a necessity. Only 81 plumbers per million of population were employed in 1850, but almost 25 times that relative number were needed in 1920. Electric lights were unknown in 1850, while now practically all of the large buildings and a large proportion of homes are equipped with electricity for lighting. Thus 2,014 electricians per million of population were reported in 1920 as compared with 667 in 1900, the first year for which a separate report was made for them. Most of the other trades, when measured by the change in population, increased rapidly from 1850 to about 1890 or 1900 and then began to fall off, in some cases, even more rapidly. Notwithstanding the changes in building construction, however, carpenters and joiners have increased in almost the same proportion as the population during the 70-year period but brick and stone masons, plasterers, and marble and stone cutters have decreased perceptibly when compared with population. Brick and stone masons and plasterers combined numbered 2,733 per million in 1850 as compared with 2,525 masons and 620 plasterers in 1890 but decreased to 1,314 masons and 362 plasterers in 1920. Marble and stone cutters are only about one-fifth as numerous as they were in 1890 and one-third as numerous as in 1850. Stone is now, to a large extent, cut at the quarry, by machinery, only the finer work being done by hand. The result of the introduction of these machines was first noticeable in the census returns for 1910. The huge increase in quarry operatives reported for that year, however, would seem to indicate that probably some marble and stone cutters have been included under that head for that year. Painters, glaziers, and varnishers increased steadily from 1,215 per million in 1850 to 3,635 in 1910 but decreased to 3,017 in 1920. Through the period there has been an increase in factory painting and varnishing and most of the glazing is now done at the factory. Commercially upholstered furniture was included among the furnishings of but a few homes in 1850, and most of the families that did indulge in the luxury of wall paper did not incur the expense of a paper hanger. The two trades combined—upholsterers and paper hangers—numbered only 112 employees per million of population in 1850. As the homemade furniture of the early years began to be replaced with the new factory-made upholstered product, the trade of upholsterer became more important. Wall paper also became less and less of a luxury and the custom of employing professional paper hangers became more

general. By 1900 more than 400 upholsterers per million of population were employed, and paper hangers had increased to 287 per million. Both trades have declined somewhat since then, there being only 280 upholsterers and 177 paper hangers per million of population in 1920.

The principal woodworking shop crafts have decreased amazingly since 1850. Coach and wagon makers, an important trade at that time, have decreased from 673 to 182 factory operatives per million of population in 1920. Wheelwrights have almost faded from the picture. Only 35 per million were employed in 1920 as compared with 1,323 in 1850. Wheels are no longer made by hand as in the early days, machines having replaced this trade almost entirely. The identity of some wheelwrights employed in factories has probably been lost in the group of factory operatives, but this would not materially affect the number shown. The coopers' trade, a very necessary one in 1850, is also fast disappearing. Steel drums, pails, sacks, and other containers have been substituted for the old wooden barrel.

The decrease of cabinetmakers from 1,611 per million of population in 1850 to 431 in 1920 is due more to the change to the factory system of manufacturing than to the introduction of machinery. More desks, tables, chairs, etc., are probably made to-day than ever before, but most of them are now made in the factory. Owing to the occupational classification used for the census, it was impossible to include these factory operatives with the hand cabinetmakers. Thus, the decrease shown in this occupation represents the decrease of hand cabinetmakers and not the decrease in the trade generally.

In the metal-working trades, machinists have increased to more than seven-fold during the 70 years—1,039 per million of population to 7,586—more than half of this increase occurring in 1910 and 1920, the automobile era. Boiler makers and pattern and model makers also have increased. Blacksmiths, however, have decreased greatly. Back in 1850 the blacksmith was a very important individual in any community. He made all the metal parts of the wagons, except the axle thimble, welded the broken parts of almost any kind of machinery or made new parts, made his own horseshoes and horseshoe nails, and many other things. Now new parts for most machines may be obtained for less than it would cost to have the blacksmith repair the old ones. The automobile and motor truck are crowding the horse-drawn wagons off the roads, literally as well as figuratively, and those that are used are made in factories. There is little left for the blacksmith to do, and as a consequence he is rapidly disappearing even from the rural communities.

The workers in automobile factories were shown separately under "iron and steel industries" in the censuses for 1910 and 1920. While the automobile is made mainly of iron and steel, yet wood, leather, and many other things also enter into its manufacture. For this reason these figures have not been included in this study as they represent only a part of the industry.

The printing trades have increased slightly less than two-fold in the last 75 years. This increase seems at first to be too small when we consider the number of newspapers, magazines, and periodicals printed to-day as compared with 1850, but machinery is the answer.

Stationary steam engineers and firemen have grown from 510 per million of population in 1850 to 3,651 in 1920. All we need to do is to look around and see the thousand and one uses to which the steam engine is now put in order to understand this increase. Locomotive engineers and firemen were shown separately for the first time in 1890 when 1,104 per million of population were employed. This number had increased to 1,904 in 1920.

The increase in bakers is due largely to the substitution of "store" bread for the home-made variety.

The effect of the introduction of machinery into our manufacturing establishments is clearly illustrated in the occupation of boot and shoe workers. The boot and shoe industry has grown by leaps and bounds since 1850, although the number of workers per million of population has decreased steadily. Back in the early days a boot and shoe maker made a pair of shoes completely. He did his own cutting, lasting, sewing, pegging—in other words, actually began and finished the shoes. At the present time practically all shoes are made in the factory. Men operating high-grade machines do the lasting, sewing, etc. In some factories a machine does even the cutting. One man seldom performs more than one operation on a pair of shoes.

The 982 harness and saddle makers per million of population in 1850 had been reduced to 189 factory operatives in 1920. The advent of the automobile and motor truck has, of course, had a great deal to do with this reduction.

The tremendous increase in the use of machinery, steel frames for building, steel rails, etc., is reflected to a large extent in the increase of iron and steel workers. Beginning with 528 blast furnace and foundry employees per million of population in 1850, the industry has increased to 8,006 employees per million in blast furnaces, rolling mills, foundries, etc., in 1920.

Textile workers increased from 1,925 spinners and weavers per million of population in 1850 to 9,097 factory operatives in 1920. Spinning and weaving are still the most important occupations in the textile industry, even though the cloth is made in factories, but the operation of the modern looms and spindles is so different from the old hand processes of 1850 as to make spinning and weaving almost entirely new occupations.

There were more than twice as many draymen, hackmen, teamsters, etc., in 1920 per million of population as in 1850, although the relative decrease since 1900 has been tremendous. Here again the effect of the introduction of the automobile and motor truck is apparent. The new occupation of chauffeur sprang into being to take the place of a large number of teamsters and drivers. This occupation was reported separately for the first time in 1910 and increased from almost 500 per million of population in that year to 2,697 in 1920.

Sailors and deck hands have grown fewer and fewer with the decrease in American ships. Our shipping industry was quite important in 1850 and 3,044 sailors per million of population were employed. By 1920 this number had shrunk to only 519 per million.

Chemists increased more than 15-fold in relation to population during the 70-year period. There were relatively 8 times as many photographers in 1920 as in 1850. The relation between clergymen and population has remained fairly constant, as is also the case with

lawyers and judges, but the number of physicians and surgeons was greater in 1850 per million of population than at any time since and was less in 1920 than in any other census year of the period covered. The ever-increasing amount of training necessary for the doctor's profession is largely responsible. Dentists have increased from 126 per million of population in 1850 to 531 in 1920.

Barbers, hairdressers, and manicurists have increased relatively almost seven-fold during the period covered, but domestic servants decreased considerably. During the war large numbers of domestics left their former employers for more congenial employment at better wages, and when the war closed they continued in other lines of employment.

It was not possible to separate clerical employees from clerks and salesmen in stores for all years, but wherever possible the separation has been made. Strictly clerical employees increased a great deal more than clerks (sales people) in stores, but both types have increased enormously.

The changes which have taken place in the occupation of agricultural laborers are better understood when considered in connection with the changes in farmers and planters. The limits of these occupations have not been sufficiently definite in all years to allow for entirely separate consideration. In 1850 no farmer laborers were reported, but it is evident from the large number of farmers and planters shown that no separation was made between the farmer and his helper for that year. Slaves, who performed a large part of the farm labor in the South in 1850 and 1860, were not, of course, included. This accounts for the large increase in the farm laboring class in 1870. Farmers and planters and agricultural laborers combined were fewer in 1920, per million of population, than in any other census year. The large decrease is more noticeable in the occupation of farm laborers than in that of farmers and planters. During the World War a large part of our fighting forces came from the farm and had not yet returned in 1920. These boys were to a large extent included under the census head of "farm laborers, home farm."

Fishermen and oystermen were only a few more per million of population in 1920 than in 1850 and considerably less than in any other year of the period.

The expansion of the coal and iron industries increased the number of miners employed from 3,338 per million of population in 1850 to 8,351 in 1920, and the increased amount of gasoline used in automobiles and trucks raised the number of employees of oil and gas wells from 99 per million of population in 1870, the first year in which separate returns were made for them, to 809 in 1920.

While the occupation census reports from which the above figures were compiled afford the only measure of the proportion of the several occupations in the population, additional data bearing on the subject are available from the census of manufactures which contains, among other things, a report of the average number of wage earners employed in the various industries by the manufacturing establishments of the country. Occupations, however, are not considered. These reports are available by 10-year periods from 1850 to 1899, and by 5-year periods from that time to 1919. The first biennial census was taken in 1921 and is included in the present study.

Before attempting any explanation of the material contained in the table presented below, it should be noted that the manufacturing census is a census of factories, with more attention given to product and investment than to producers. These statistics are compiled primarily for the purpose of showing the absolute and relative magnitude of the various branches of industry covered, and their growth and decline. However, in addition, the number of wage earners is reported, and when the various industries are being studied without regard to occupations, these figures are probably preferable to the occupational statistics. In the occupational census, for example, a carpenter is reported under the head of carpenter regardless of where he may be employed, while in the manufacturing census he would be included only as a wage earner under the industry in which he works.

In presenting the following data compiled from the census of manufactures, only four of the principal industries in the United States have been chosen. Three of them are industries having occupations that are included in the occupational table. In no case, however, are the figures in this table comparable with those in the other, as the method of collecting data is entirely different. The method of enumeration used in the occupational census is the house-to-house canvass, the occupation of each individual being reported regardless of whether or not he is actually employed at the time of the census. Every person 10 years of age or over engaged in productive labor is included in the occupational information. Reports prepared by manufacturing plants are used for the census of manufactures, and only those persons employed in manufacturing plants with annual products of a value of \$500 or over are included in the data.

The figures shown in the table below, while not comparable with those for the same industries in the occupational data, serve a distinct purpose and have been included in this article as supplemental or additional information and not with the idea of comparison. In the case of boot and shoe workers, for example, in the occupation table the effort has been made to trace the boot and shoe makers from 1850 to 1920. Census designations have changed in the 70-year period and the shoemaker has given way to the shoe-factory operative. In the manufacturing census the wage earners, while mainly operatives engaged in the manufacture of shoes, include a few general occupations in the plants, as those of carpenter, machinist, engineer, fireman, etc.

In date the enumeration of population does not coincide with the manufacturing census. To illustrate, the population count was made as of June 1, 1900, while the manufacturing census covered the year 1899 and gave the average number of wage earners during that year. These two numbers, however, are used together in computing the proportion per million of population, as in point of time they speak for nearly enough the same date. The population count of 1920 was as of January 1. The estimates of population which the census bureau made for the years 1904, 1914, and 1921 have been used, however, as the census of population is taken at 10-year periods only.

ACTUAL NUMBER OF WAGE EARNERS, AND NUMBER OF WAGE EARNERS PER
MILLION OF POPULATION, EMPLOYED IN VARIOUS INDUSTRIES AS SHOWN BY
THE CENSUS OF MANUFACTURES, 1850 TO 1921

Industry	1850	1860	1870	1879	1889	1899	1904	1909	1914	1919	1921
<i>Iron and steel</i>											
Blast furnaces:											
Wage earners.....	20,448	15,927	27,554	30,000	33,415	39,241	35,078	38,429	29,356	41,660	18,698
Wage earners per million population.....	882	507	715	598	531	516	432	418	300	394	171
Steel works and rolling mills:											
Wage earners.....	39,837	49,034	91,651	110,798	137,766	183,249	207,562	240,076	248,716	375,088	235,515
Wage earners per million population.....	1,718	1,559	2,376	2,209	2,189	2,411	2,554	2,610	2,540	3,548	2,184
<i>Textiles</i>											
Cotton goods:											
Wage earners.....	92,286	122,028	135,369	172,544	218,876	302,861	315,874	378,882	393,404	446,852	425,835
Wage earners per million population.....	3,979	3,881	3,511	3,440	3,477	3,985	3,887	4,120	4,017	4,227	3,949
Woolen goods:											
Wage earners.....	45,438	50,419	105,071	132,676	154,271	159,108	179,976	202,029	195,285	196,404	190,948
Wage earners per million population.....	1,959	1,603	2,725	2,645	2,451	2,094	2,215	2,197	1,994	1,858	1,771
Silk goods:											
Wage earners.....	1,723	5,435	6,649	31,337	49,382	65,416	79,601	99,037	108,170	126,782	121,603
Wage earners per million population.....	74	173	172	625	784	861	980	1,077	1,105	1,199	1,128
Hosiery and knit goods:											
Wage earners.....	2,325	10,532	18,846	30,699	59,774	83,691	104,092	129,275	150,520	172,572	162,078
Wage earners per million population.....	100	335	489	612	950	1,101	1,281	1,406	1,537	1,632	1,500
<i>Boots and shoes²</i>											
Boots and shoes (including repairing):											
Wage earners.....	105,305	123,030	138,662	143,301							
Wage earners per million population.....	4,541	3,913	3,596	2,857							
Boots and shoes (not including repairing):											
Wage earners.....				115,972	142,116	151,231	160,294	198,297	206,088	229,705	196,586
Wage earners per million population.....				2,312	2,258	1,990	1,972	2,156	2,104	2,173	1,828
<i>Motor vehicles³</i>											
Wage earners.....						(4)	12,049	75,721	127,092	343,115	213,116
Wage earners per million population.....							148	823	1,298	3,246	1,970

¹ Not reported separately; this number is an estimate.

² Including cut stock and findings.

³ Including bodies and parts.

⁴ No data covering bodies and parts—2,241 wage earners for motor vehicles.

INDUSTRIAL RELATIONS AND LABOR CONDITIONS

Labor Passages in the President's Speech to Textile Manufacturers ¹

ALTHOUGH there has been something of depression in certain branches of industry, a broad view suggests no serious occasion of concern about its outlook. Our imports of cotton fabrics have increased largely in recent years, but our exports have also grown extensively. In 1924 we sold abroad nearly 500,000,000 yards of these goods, or nearly 20 per cent more than in the pre-war years. Considering the widespread demoralization in world markets since the war, such a showing can not reasonably be regarded as discouraging. Probably there is no industry in which conditions affecting international trade and finance are more constantly and definitely reflected than in this one.

There was a measure of overproduction in cotton goods in 1923, from which the industry has not yet entirely recovered. The excessive output of that year left a considerable surplus to be consumed thereafter. But with the gradual improvement of conditions throughout the world, as the war recedes further from us, we are entitled to view with increasing assurance the outlook for business in all directions, including, of course, the great textile industry.

It is scarcely necessary to state the attitude which I desire to see the National Government assume toward all business in general and the textile industry in particular. It is that of sympathy and cooperation for every lawful effort to promote our commercial prosperity and our economic well-being. Modern industry, with its great combinations and great aggregations of both capital and employees, has necessarily brought many new problems for solution in our effort to work out a righteous human relationship. These new conditions made necessary new rules of conduct. Many of these have already become well established and are believed to have been productive of good. But there still exists a considerable area, sometimes designated as a twilight zone, in which the proper standard of action is as yet undetermined.

The Government necessarily looks to the management of industry as mainly responsible for the conduct of industry. There ought to be a most candid understanding between the Government and all industrial effort. Due to the keenness of competition and the urgent desire for success, it is necessary to maintain the most constant watchfulness on the part of the Government to insure the enforcement of the law. But on the part of the management there should likewise be the same vigilance to insure the observance of the law. We shall never reach an ideal condition in our industrial life until the laws are voluntarily observed by our citizens without the constant and wasteful interposition of Government and court action. You men who are responsible for an industry ought to make unlawful and improper practices in that industry thoroughly unfashionable.

¹ Speech delivered before convention of the National Cotton Manufacturers' Association, Washington, D. C., Apr. 6, 1925.

It may seem expensive to change improper practices, but they will have to be changed in the end, and the sooner it is done the less expensive it will be.

Industry has come thoroughly to recognize its responsibility toward its employees. The Government approves of and shares in that responsibility. It regards the welfare of the wage earners with the utmost solicitude. It has come to be recognized almost universally that only upon justice to the wage earners of the Nation can there be reared any lasting prosperity. America is unwilling to nourish any system under which the rewards of human effort are not equitably distributed among all those engaged in any industry.

The great agencies of the Government are constantly at your disposal to assist and encourage you in your production and defend you in your rights. The Department of Commerce, with its various research bureaus, domestic and foreign agencies, is forever diligent in stimulating your production, advising more efficient methods, discovering new and enlarged markets, and coordinating industrial activity. The Federal Trade Board has been devised for the purpose of safeguarding your rights, protecting you from unfair trade practices, and admonishing and correcting you if you are wrong. The Department of Labor is constantly engaged in preventing and adjusting disputes between employer and employee, to promote justice and avoid the great waste of interrupted operation and production. But I refrain from further specific mention of the many activities of the Government in behalf of the industrial life of the Nation.

I confess that I desire to see our country prosperous. I am aware there can be no prosperity in which the textile industry does not have a generous share. I do not believe there can be any permanent prosperity which does not rest on the everlasting foundation of justice. In the effort of the Government to promote justice, no industry should have anything to fear. In the effort of the Government to provide constructive economy in public expenditure, all industry should concur. In the effort of the Government to encourage harmony in all our domestic relations, every industry should cooperate. In the effort of the Government to secure a firmer faith of the people of the earth in each other, which will establish an indwelling peace in the heart of mankind, all industry should rejoice.

President Coolidge and the Laboring Man

AN OLD friend of the Secretary of Labor, a delegate to the steel workers' convention, asked the Secretary this question: "Is President Coolidge favorable to the laboring man?" To this the Secretary made the following reply:

Calvin Coolidge is all right for any man who doesn't want to be wrong. Calvin Coolidge is all right for any industry that doesn't want to be wrong. Any organization that insists upon trying to get away with something crooked will have a lot of trouble with the President, and will probably hire a corps of talented literary people to say mean things in print about him.

Take it from me, he expects every man and every group of men to do their duty and obey the law. Within their line of duty and within the law, every man and every group of men, every industry and every union can depend upon President

Coolidge to be with them to the limit in the defense of their rights. Moreover, in the neglect of their duty and in the violation of the law they can depend upon him to use the full power of his position and of the Government to punish or eradicate abuses. You will find him a most dependable person on whichever side of the moral code you are working.

Every worker and every manufacturer ought to study the President's speech which he delivered before the Convention of the National Cotton Manufacturers' Association on last Monday night, April 6. In it he makes it very clear that while you keep within the law in your efforts to work out a righteous, human relationship, he will do everything for you that he can, and that when you get outside of the law and practice injustices, he will do everything to you that he can. He says that the attitude of the Government "is that of sympathy and of cooperation for every lawful effort to promote our commercial prosperity and our economic well-being." He realizes that "modern industry, with its great combinations and the great aggregations of both capital and employees, has necessarily brought many new problems for solution in our effort to work out a righteous human relationship. These new conditions made necessary new rules of conduct. Many of these have become well established and are believed to have been productive of good. But there still exists a considerable area, sometimes designated as a twilight zone, in which the proper standard of action is as yet undetermined."

"The Government necessarily looks to the management of industry as mainly responsible for the conduct of industry." In other words, just as in Government service he appoints a man to a position, gives him full sweep within the law to do his work, holds him responsible for results, and if he does not get results fires him; so he looks upon those in control of an industry to conduct that industry legally and righteously.

While the Government will maintain a constant watchfulness to insure the enforcement of the law, the President sees a far better solution when the forces within an industry shall themselves see to it that not only the laws are lived up to but that the best possible standards of righteous relationship is maintained for all concerned. He tells you that where bad practices have grown up in an industry it is better for you to correct these yourselves than to have it done by the Government, and since you may rest assured that if you do not do it yourselves it will be done by the Government, it is cheaper in the end to do it yourselves at once. I want to quote you this part of his speech:

"* * * But on the part of the management there should likewise be the same vigilance to insure the observance of the law. We shall never reach an ideal condition in our industrial life until the laws are voluntarily observed by our citizens without the constant and wasteful interposition of Government and court action. You men who are responsible for an industry ought to make unlawful and improper practices in that industry thoroughly unfashionable. It may seem expensive to change improper practices, but they will have to be changed in the end, and the sooner it is done the less expensive it will be.

"Industry has come thoroughly to recognize its responsibility toward its employees. The Government approves of and shares in that responsibility. It regards the welfare of the wage earners with the utmost solicitude. It has come to be recognized almost universally that only upon justice to the wage earners of the Nation can there be reared any lasting prosperity. America is unwilling to nourish any system under which the rewards of human effort are not equitably distributed among all those engaged in any industry."

I think you will realize that the President sees straight through the whole problem, and this has been my observation of him—that no man is quicker to see through to the core of things no matter how much they may be camouflaged and gilded and painted. If your proposition is essentially unlawful and unsound, he sees that essence no matter how brilliantly you picture the design to conceal it. On the other hand, if your proposition is essentially legal and sound he sees that essence and is ready to forgive any uncouthness or lack of tact in your method of presenting it. Born and reared in the hills of Vermont, his keen mind saw through the mountain rocks to the literary, economic, political world beyond. Some people will tell you that he has been wonderfully favored by accident all along, but let me tell you that accidents do not always boost; in fact, they generally bump, and Calvin Coolidge has stepped over the stones of a Vermont farm into the Presidency—he has not stumbled over them. He is guided in his private and public life by the precepts of the Bible and the Constitution of the United States. So long as you are within these you can depend upon it that he will be with you.

Experiment of Protocolism in the Women's Garment Trades

IT IS characteristic of the general attitude of the bodies making up the International Ladies' Garment Workers' Union that when they decided it would be well to have a history of the development of their organization, instead of undertaking the work themselves or employing a literary hack, they looked around for a thoroughly qualified specialist in the lines required, and put the whole matter into his hands. The result is a volume¹ of some 600 pages, crowded with facts, bristling with detail, and yet presenting a vivid, well-rounded, and interesting picture of the progress of the women's garment makers from a disorganized and incoherent group, alien to one another in race, language, and religion, oppressed by long hours, starvation wages, and sweatshop conditions, into one of the most vigorous and progressive organizations in the American labor movement. It is quite impossible within the limits of a brief article to do justice to the study, and much of which it treats is of more importance within the trade than outside. There are, however, many matters of general interest, prominent among which are the study of the protocol and the analysis of the causes which led to its failure and disappearance.

The protocol belongs to such a recent past that it is not necessary to go into the details of its history. It was adopted in 1910, as a means of settling a strike in the New York cloak and suit trade which had been bitterly fought on both sides, which had roused much public interest, and which had brought in, as mediators, some of the most liberal and progressive students of social movements in the whole country. In one sense, it was only a variation of the collective agreement, by which strikes are often settled, but it had some novel features, and was the manifestation of a new spirit. It secured for the workers certain improvements in wages and hours, but far more important was its assertion of the belief that employers and employees had a common interest in the efficient functioning of the industry, and that their joint action was needed to secure this. It established joint boards of sanitary control to improve health conditions, which were notoriously bad; it set up committees in each shop to deal with minor grievances, and provided for a board of arbitration consisting of one nominee of the unions, one nominee of the manufacturers, and one representative of the public to handle disputes which the grievance committees could not settle. The underlying idea inspiring the "father of protocolism," Louis D. Brandeis, was that there was much need of some method of bringing employer and employee together in a united effort to meet the difficulties and solve the problems of the industry, and that through these joint bodies the contact might be made.

All industrial grievances, in his opinion, were either matters which could be settled by relative concessions on both sides, or they were real difficulties which could be removed only by "industrial invention." In other words, he believed that through mutual contact employers and workers in any industry could learn to solve all their difficulties by the use of brain power, instead of by force.

Naturally, in signing the protocol, neither employers nor employees were actuated by such ideals alone. The workers secured immediate

¹ Levine, Louis: *The Women's Garment Workers*. New York, B. W. Huebsch (Inc.), 1924, pp. 196-318.

and substantial advantages, while the manufacturers gained freedom from strikes and an approach to uniformity in hours and wages throughout the industry, with a consequent decrease in competition. Nevertheless, both sides were aware of the ideals involved, and the leaders, at least, seemed sincerely desirous of carrying out the agreement in good faith, with a view to realizing its utmost possibilities.

Starting under such auspices the protocol had for a time an almost meteoric success. Sanitary conditions were improved, subcontracting disappeared, there was a general leveling up of wage rates and earnings, and an improvement of relations between employers and employees.

The idea of law and of constitutional procedure took the place of the former system of arbitrariness and of the unrestricted rule of the employer's will. * * * A hitherto unknown sense of regularity spread throughout the trade, as both employers and workers carried their grievances to their chief clerks and from them to the board of grievances. With every session of the board the picture of an industrial court examining disputes, passing judgments, and regulating the life of the shops took on color and vividness.

The experiment attracted wide interest, and trade leaders and students of social and economic developments studied its workings and proclaimed its merits. Other trades and unions took it up. In 1911 a protocol agreement was established in the ladies' tailoring trade of New York. In 1912 a number of garment trades in New York, mostly in the hands of women, secured such agreements, bringing some 57,000 additional workers under the new plan, while in Boston about 3,000 workers in the dress and waist trade obtained protocol agreements from their employers. In 1913 the Boston cloak and suit workers established a protocol modeled on the New York lines, and strikes were begun in Philadelphia, Baltimore, and St. Louis to obtain the same kind of agreement.

This year marked the climax of the movement. Friction in the application of the agreements had developed almost from the beginning. Perhaps the protocol made too strenuous demands upon the good feeling and intelligence and broad mindedness of both parties. For a generation before its adoption conditions in the garment trades had been chaotic, competition had been unlimited, success had been won by seizing an immediate advantage wherever it could be secured, without consideration of underlying principles or ultimate results, workers and employers alike were individualistic and untrained in cooperative effort, and it was asking a good deal to require them to submit to the orderly processes of the protocol, under which a present, personal gain must often be subordinated to a future general advantage. So difficulties multiplied, the bright hopes of the first period grew dim, and in 1915 the employers in the New York cloak and suit trade served notice that they were unwilling to work longer under the protocol. A compromise was arranged but it proved unsuccessful, and early in 1916 the employers definitely withdrew from the agreement. A lockout and strike followed, which was settled by another collective agreement, from which the whole machinery of the protocol was eliminated. In Boston and Philadelphia the protocols in the cloak and suit trade were abrogated in the same year, and in the weaker trades they were quietly dropped without formal action.

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Why did the movement, which began so brilliantly, fail so entirely? Doctor Levine finds the answer in the conditions inherent in the trade, and in the mental attitude of the two parties. There were, of course, minor causes. The machinery of the protocol did not sufficiently allow for the friction inevitable in an attempt to work together when neither side had had experience in cooperative methods. Factional struggles between the workers interfered with the success of the plan, and the industrial depression of 1914, making conditions in the trade much worse, played into the hands of its enemies. But these handicaps might have been overcome; more fundamental causes were responsible for the failure.

The first effects of the protocol, it is pointed out, were advantageous to both workers and employers, and this had much to do with the enthusiasm which prevailed during its early days. The workers gained a leveling up of wages and an improvement in general working conditions; the employers gained the elimination of strikes, which enabled them to make higher profits without any thoroughgoing improvements in their management or sales methods, and gave them also industrial peace in which to enjoy their gains. But these early improvements were not followed up as had been anticipated. Protocolism, it had been repeatedly declared, meant a decent standard of living for the workers, with a progressive advance in both living and working conditions. Yet, after the first improvements had been made, it was a continuous struggle for the workers to secure any forward steps. This naturally shook their faith in the possibilities of the experiment and diminished their enthusiasm, while, on their side, the employers declared that they were unable to pay the wages or make the improvements which protocolism demanded.

This inability was due, in part, to the industrial depression of 1914, but more to the manner in which the industry was conducted, and the failure of the employers to develop better methods.

Before 1910 the industry was carried on largely on a sweatshop basis. With reforms introduced by the protocol, it became necessary to raise the industry to a more civilized plane. But after the first efforts in this direction, the employers in the various branches of the industry found it more and more difficult to keep up the pace. Few of them acquired the degree of business and managerial efficiency which were required to fulfill the promise of the protocol to the workers for improved conditions. Most of them inevitably accepted the alternative of resisting the demands of the workers, which necessarily was out of harmony with the spirit of protocolism.

Even the employers who wished to adopt progressive and enlightened methods were handicapped by the unlimited competition which the nature of the industry permitted. In some industries, large-scale production permits economies which give the large and well-managed concern an advantage over the small and badly managed establishments. This was not the case in the garment trades, where it was still possible for a man who could scrape together a little capital to open a small shop, underbid his larger rival, and make his profit by cutting wages and refusing decent working conditions. It had been hoped that under the protocol wages and conditions would be standardized and the objectionable shops eliminated, but this result was not obtained. The ease with which small shops could be started, the seasonal nature of the industry, and the competitive habits of the workers themselves all stood in the way of

success, and by themselves the unions were not strong enough to change these conditions within the short period for which protocolism endured. To fulfill the promise of the protocol, it was necessary that the industry should be regularized, that there should be some control over the labor supply, that earnings should be brought into some definite relation to output, and that there should be some recognized method of fixing piece rates.

There were two ways in which this might be accomplished. The first was for employers and employees to undertake the task together through their cooperative boards, assuming joint responsibility and joint control. This was the method which the leaders in the New York cloak and suit trade strove unsuccessfully to develop.

This method of democratic government failed because psychologically and ideologically the industry was not ready for it. Even in the heyday of protocolism, the employers could not accept the idea that the workers were on an equal basis with them in the industry. The leaders of the Protective Association who made much of the protocol were in reality guided more by the vision of becoming "benign masters" than by the ideal of democracy in industry. * * * Workers and union officials alike were sensitive to this attitude.

If joint control within the industry were impracticable, control might be exercised by some outside agency upon which the two sides should agree, and this method was tried in the dress and waist trade. But for this to be successful, it was necessary that there should be strict supervision of business methods and an impartial control of both employers and workers. Both alike must be regarded as factors in production, and questions of their relations must be settled on a basis of scientific standardization and full knowledge of all pertinent facts. But such a course ran counter to all the individualistic traditions of the industry. The belief in the value of trade secrets, the use of speculative methods, and the reliance upon strategy as a means of capturing business put almost insuperable obstacles in the way of a plan based on scientific principles and requiring close scrutiny of all methods and interests.

In the last analysis, the protocol came to an end because of two fundamental contradictions. It imposed upon the industry a demand for progressive improvements which could not be met on the existing basis of doing business. And it implied a spirit of democracy and a willingness to accept the dictates of scientific control which were in conflict with the traditions and ideology of the industry. To state it simply, the employers would not relinquish what they conceived to be their prerogatives and the workers felt that they had to force the employers to do so. In other words, the philosophy of a community of interests and of arbitration by reason with which the protocol started out clashed with the fundamental conflicting interests. When the latter were brought to a focus in the issue of control in the summer of 1916, the whole structure of protocolism went to smash.

In other words, the protocol embodied ideals in advance of its time, and fell through because it called for a higher degree of intelligence, self-control, good feeling, and subordination of personal preferences and customs to the general good than either employers or employees were prepared to exercise. Nevertheless, the experiment was by no means a total failure. The protocol perished, but its results persisted. The idea of collective bargaining, as a practicable policy, was established in the chief centers of the industry. The workers gained their first effective lessons in collective discipline and the handling of union problems. They learned that a rule-of-thumb knowledge of the industry was not sufficient as a basis for

improving conditions, and gained a new respect for the services of statisticians, economists, and industrial experts as they saw the results of their technical studies of conditions. They waked up to the fact that the help of such specialists was indispensable in securing a body of facts on which advance movements might be founded, and that without such a basis of facts optimistic efforts at improvement were foredoomed to failure. They learned the possibility of real cooperation, through collective action, with their employers in organizing and developing the industry. And they, like the employers, benefited by the improved standing the experiment had given the industry in the estimation of the public.

The protocol in general lifted the women's garment trades from the status of a despised immigrant industry to that of national interest and importance. Through the men and women who were drawn into the service of the protocol, the industry was dragged out of the obscurity of the immigrant ghettos into the limelight of general community interests.

Reducing Labor Turnover at Coal Mines

A PAPER read by Eugene McAuliffe at a meeting of the Rocky Mountain Coal Mining Institute, held February 16-18, 1925, dealt with the problem of accident reduction at coal mines. Mr. McAuliffe noted the fact that "the labor turnover at coal mines has long been a fertile subject for parade by complaining coal operators, the question invariably occupying a place of prominence in the list of disabilities that tend to increase the cost of producing coal," but found that little has been done to remove the causes of excessive labor turnover at the mines. Due to the character of mine employment and its hazards, the difficulty of close personal supervision of individual employees, and the impossibility, at times, of transmitting understandable directions to men of many diverse nationalities, he was of the opinion that the cost of securing and breaking in new men for underground work equals that in manufacturing industries—\$100 per man.

In speaking of labor turnover the speaker excluded the enforced shifting about of men laid off by the shutdown of mines due to accident or lack of material, and included only dismissals and voluntary resignations, holding that it is in these two classes that hope of improvement lies. These two classes of departures may, he contends, be reduced by a system similar to that adopted on the railroads of the country, since "there is much similarity between the railroad problems of a few years ago and the coal-mining problems of to-day. The railroads have, it may be said, found a solution of their labor troubles."

On the railroads it had been found that dismissal as a punishment for violation of rules had no constructive influence whatever. Suspensions and dismissals, therefore, except for certain extreme causes, were abolished and a system of debit and credit marks, without loss of pay, was substituted. Under the new scheme an individual record was kept for each man, and demerits were charged against his record, the number "bearing a direct relation to the seriousness of the offense, with provision for the removal of demerits after a given period of satisfactory service." Dismissal was looked upon as a

"capital punishment" and exercised only in cases involving disloyalty, dishonesty, intoxication, or malicious and gross carelessness.

Use of the new system resulted in (1) a greater security of employment; (2) a decrease in the number of vacancies, making job seeking more difficult on the part of those who merely sought a change of environment; (3) a rapid growth in the value of the service rendered by the individual employee; (4) the almost complete disappearance of the professional "boomer"; and a marked reduction in the number of accidents properly chargeable to man failure. It is stated that "with a feeling of security based on the definite knowledge that careful, faithful service will be recognized, not only by freedom from dismissal, but through advancement and promotion, the railroad employees of this country have developed into a class of citizens second to none."

Mr. McAuliffe suggested, in conclusion, that it might be well for the coal industry to examine carefully the methods used by the railroads and to expand, in the direction described above, the efforts now being made toward more stable employment of mine labor.

Employee Representation on Railroads

IN A speech delivered before the Industrial Club of Chicago, January 29, 1925, and printed in the *Railway Age* of February 7, 1925 (pp. 380-382), Gen. W. W. Atterbury, vice president of the Pennsylvania Railroad, stated that in his opinion three things were necessary to railroad progress and prosperity—credit, the active good will and cooperation of the American public, and the cooperation of the railroad employees. As to the third requisite, he said:

Now, the third essential to railroad progress and prosperity is cooperation of railroad employees. In this respect the relationship between railroads and industry is of far-reaching importance. The margin between income and outgo in the railroad business is so small that we must have the cooperation of the men on the railroads themselves in order to operate efficiently and economically. It is likewise essential that in our efforts to secure that cooperation we have the support of the business community to the extent that our policies are sound and deserve such support.

You have no doubt heard and read a great deal about what has been accomplished on the Pennsylvania Railroad through our plan of employee representation. I shall not go into the details of its operation. The important things are the principles underlying it, and the spirit in which it is carried out.

Essentially it is this: Any employee can belong to any union he desires, but the Pennsylvania Railroad insists upon dealing with its own employees and not with the representatives of absentee organizations to which they belong. The Pennsylvania deals with its employees collectively through employee representatives elected by secret ballot, regardless of their membership or nonmembership in any organizations.

Every important matter affecting the employees' wages and working conditions is settled by joint action. The highest authority on the railroad in the determination of these questions is a joint reviewing committee in each department of the service, equally representative of management and men. A two-thirds vote is necessary to decide any question. Only six cases in four years have had to go beyond that committee, and each of these cases was settled by arbitrators chosen by the committee, which in turn accepted their decision.

The whole plan is designed, through a series of regularly scheduled meetings between management and men, to give every individual employee a fair hearing by a responsible officer, a prompt decision, and a review, if necessary, by a joint board of officers and men, which has final authority.

Now the point I make in this connection is that a relationship between management and men based on these principles of mutual confidence, facts jointly established, and fair play is essentially in the public interest. By the same token, any effort on the part of outsiders, whether Government or private agencies, to drive a wedge between railroad management and railroad employees, is certainly not in the interest of the employees themselves, of the company, or of our service to the public.

Report of Negro Industrial Commission of Missouri

THE third biennial report of the Missouri Negro Industrial Commission, covering the years 1923 and 1924, calls attention to the fact, sometimes overlooked, that the negro migration is not only from the South to the North, but from one part of the South to another. Missouri has received its full share of this migration, and as a consequence various problems of adjustment have come to the fore.

In 1919 the negro population of Missouri was approximately 175,000; the large migration of our people from the Southern States has increased the negro population to approximately 250,000. The problems of maladjustment, housing, health, interracial and industrial relations are problems of vital importance which cause grave concern and which should receive much greater support from the great State of Missouri.

Missouri offers a peculiar opportunity for these newcomers, because its cultivation of cotton, which has increased greatly within recent years, gives a chance for the rural negroes who prefer to continue the kind of work to which they are accustomed rather than to enter the industries of the large cities. Thousands of negro migrants, it is said, have flocked into the southeastern counties to work in the cotton fields, and on the whole have benefited by the change, securing better housing and better chances generally than they had in the States they left. The report contains an earnest appeal to these newcomers to "make good," and to realize that in these districts, where formerly the negro population was small or nonexistent, the future for the colored people depends on how well the migrants adapt themselves to their new conditions.

The educational question presents many difficulties. Missouri does not permit negroes to attend the same schools as the whites, but no district is obliged to establish a school for negroes unless it contains at least 15 colored children of school age. "Because of this law hundreds of colored children are without educational facilities." Moreover, such colored schools as they have are insufficiently supported and supervised. A law of 1921 called for one negro supervisor of schools for the State, but it is pointed out that this does not meet the needs of the situation.

According to recent statistics there are 750 colored schools in Missouri. The average school term is less than 180 days. If it were possible for an inspector to visit four schools each day he could not begin to cover the territory. There should be more workers added, especially trained vocational workers.

In regard to country schools, it is admitted that the money question is a difficult one. "It is evident that many school districts are unable to fully equip a school for white children and that it will be some time at least before they will be able to equip one for colored children." To meet this situation, the report recommends the passage of laws authorizing appropriations which will enable the counties to take advantage of the help offered by the Jeans and Rosenwald funds.

In spite of insufficient school facilities, illiteracy is decreasing. Figures are presented showing that in the group aged 65 and over, 59.3 per cent are illiterate, of those aged 55 to 64, the percentage of illiteracy is 34.5, among those aged 45 to 54 it is 17.9, and drops rapidly in the younger groups, being only 3.6 per cent among those aged 10 to 14.

The matter of housing presents very serious difficulties. In the cotton counties, it is stated, hundreds of new houses have been built for the migrants, and these are usually an improvement upon the housing they have left, but in the cities little of this sort has been done, and conditions are bad. An interesting suggestion is quoted in regard to the situation in St. Louis. There, as in some other cities, negroes are discriminated against in the matter of rents, and are crowded together in old and insanitary buildings, in which healthful living is almost impossible. The whites objected to their moving into white districts, and proposed a segregated district, but without any promise that good conditions of drainage, paving, etc., should be provided in it. One of the St. Louis newspapers discusses this matter, admits the objection of the colored residents to such a scheme and its doubtful constitutionality, and proposes in its stead the following plan.

There is one obvious way to settle this vexing problem, namely, by appealing to the self-interest of colored property buyers and renters, by offering them, in areas not preempted by white owners and tenants, as good accommodations as would be offered to white people for the same money. This would encourage colored buyers and tenants to take such accommodations. And it would be but simple justice, as well as in the general interest.

The commission renews its appeal made in the report of two years ago for some State provision for the tuberculous, the feeble-minded, and the insane of the negro race, pointing out the loss from an economic standpoint and the danger from a health standpoint of permitting these to mingle with the general population, when institutional care is plainly called for. The report closes with a series of recommendations, which are of interest as showing the points on which the colored people themselves lay the most stress.

We deem it advisable to recommend the following remedial legislation for the welfare of the colored citizens of the State:

1. Adequate appropriation for Lincoln University.
2. That provision be made for the education of all the children of the State regardless of color or local conditions; (b) that more State aid be given to weak districts so as to enable them to adequately maintain the dual system of education; (c) we recommend the passage of the community school bill.
3. That a separate institution be established for our delinquent boys who are now confined at Boonville.
4. That a sanatorium be established for the tuberculous members of the race.
5. Adequate appropriation for a home for feeble-minded colored people.
6. A minimum teacher's salary scale, based upon training and experience. (b) Adequate appropriation for district summer normals for colored teachers.
7. A more nearly equitable recognition of the colored citizens of the State in the matter of appointments in the various forms of public service, particularly in the large number of interests in which colored people are directly engaged or concerned. (b) We recommend the following deputy appointments: Deputy food and drug commissioner, deputy insurance commissioner, representation on the board of charities and corrections.
8. We recommend that Hall A, colored section of the prison, be enlarged and that sanitary plumbing be installed. The present conditions are not conducive to good morals nor good health.

Socio-Economic Conditions in Two Chinese Villages

THE results of two social surveys in villages near Peking by students of Tsing Hua College, Peking, China, under the direction of Dr. Ta Chen, are published in the *Chinese Economic Monthly*, February, 1925 (pp. 11-23). The survey covers 91 families comprising 411 persons in the village of Chenfu and 56 families consisting of 284 persons in Hupien. These surveys, which reveal a deplorable economic condition, are believed to be fairly representative of conditions among the poor-class Chinese in rural communities.

Chenfu.—The village of Chenfu is located about 6 miles from Peking near the old summer palace, the population of the village consisting largely of Manchus whose families were formerly employed by the imperial household. Since 1911, however, when the pension system for the Manchus was discontinued, the economic status of many of the families has steadily declined. The country about the village is level and the soil is rich, but in summer the temperature may reach 110° F. and in winter may drop to zero.

Among the 411 persons covered by the study there were 177 adults and 234 children, all but 17 of the adults being in some kind of employment. Among the industrial workers were carpenters, tilers, mat makers, servants, cooks, and ricscha pullers. The carpenters, tilers, and mat makers were, in general, employed in Peking or Tungchow and these being skilled workers, their families were among the more prosperous of those studied.

There were few engaged in educational or agricultural work but a number were in military or commercial pursuits. Enlistment in the army is common among the Manchus; in the old days the body-guard of the Emperor, as well as the provincial garrisons, was for the most part composed of Manchu soldiers. At present the finances in the army are very unsatisfactory and the military class are among the worst sufferers in the community. Young boys up to 14 years of age are often apprenticed to commercial establishments, the employers providing them with food, clothing, room, medical care, and training during the three years of apprenticeship. Of the woman workers the majority were from the poorest families and were employed as maids or nurses.

The average monthly earnings per person were found to be \$7.76 (Mexican ¹). Fifty-five persons earned from \$1 to \$5, 44 from \$6 to \$10, 11 from \$11 to \$15, 3 from \$16 to \$20, 3 from \$21 to \$25, and 2 over \$31. The earnings of 59 persons were not shown separately.

The daily expenditure on articles of food was ascertained for 82 families. Forty-four adults and 33 children were found to spend as little as an average of 8.8 coppers per adult, children of all ages under 14 years being counted as half adults so far as consumption of food was concerned, while the food of only 3 adults and 4 children was found to average as much as 48 coppers per adult per day. The average daily cost of food per adult was 15 coppers. The principal articles of diet were maize, millet, potatoes, fresh and pickled vegetables, vegetable oil, and sauce, with no meat except

¹ Mexican dollar at par equals approximately 50 cents United States currency; both par value and exchange rate vary. The number of coppers to the dollar varies in different places.

on festival days. Data on rent covered 52 families only, as the remainder either owned their homes or gave insufficient information. The average rent paid by the 52 families was 105 coppers per month.

At the time the study was made, only 113 of the 234 children attended the primary school but the number has since increased to 141. The school, which furnishes instruction in elementary subjects, was started in 1914 by the president of Tsing Hua College. It has been reorganized into a regular primary school under the regulations of the Ministry of Education but is supported entirely by the Chinese members of the college, who contribute a little more than \$100 a month for its expenses. There are three tutors in the village who have about 60 pupils for whom they charge a small tuition fee. These tutors follow the old-fashioned method of instruction and only occasionally use the textbooks used in the primary schools.

Since the abolishment of the Manchu pension system and the consequent increase in poverty, a kitchen has been opened in the village which distributes millet porridge to the poor of Chenfu and the neighboring villages each morning during about five months of the year. The average number of persons coming to the kitchen for porridge is about 300 per day.

Hupien.—In Hupien the living conditions of 56 families consisting of 284 individuals were investigated, of whom 103 were employed. The largest number of males, 42, were employed in pawnshops in neighboring cities. There were 42 agricultural workers, 16 industrial workers, and 2 teachers. Among the agricultural and industrial workers there were 27 women and girls.

The monthly earnings of 81 persons were shown. Of these, 54 earned from \$1 to \$5, 11 from \$6 to \$10, 6 from \$11 to \$15, 3 from \$16 to \$20, 4 from \$21 to \$35, and 3, \$46 and over. Four persons who were managers of pawnshops earned between \$50 and \$100 per month.

The average cost of food per adult per day was 16 coppers, the expenditures of all but five of the members of the 44 families reporting ranging from an average of 8.5 to 48 coppers per day. The average annual rent paid by 29 families amounted to \$5.50 while there were 21 families who owned their own homes.

Among the 44 families which furnished fairly satisfactory data relating to children, there were 130 children who had reached school age, but only about 60 were attending the village primary school. Since 1912 the school has been maintained by the village, about \$400 yearly being contributed for this purpose. There is also a free night school for boys and girls.

The data secured as to expenditures for clothing were unsatisfactory in both towns but they have been estimated, on the basis of a cost of living study among the employees of Tsing Hua College,² to be approximately \$40 per family.

Estimated cost of living.—The following table shows the estimated annual cost of living of families in the villages of Chenfu and Hupien. It was impossible to estimate the total income of the families as some were reluctant to give information about their property. In

²See also MONTHLY LABOR REVIEW, January, 1925, pp. 57, 58.

many cases, however, the occupational earnings represent the only source of income.

	Chenfu	Hupien
Food.....	\$84. 00	\$106. 60
Clothing.....	40. 00	40. 00
Rent.....	6. 00	5. 50
Miscellaneous (fuel, light).....	5. 00	5. 00
Total expenses.....	135. 00	157. 10
Occupational earnings.....	93. 12	88. 80
Deficit.....	41. 88	68. 30

Recommendations of German Medical Factory Inspectors as to Rest Periods¹

IN THE regulation of the hours of labor in industry, the problem of rest periods often plays an important rôle. While German employers as a rule endeavor to fix the number and duration of rest periods so as to insure the workers sufficient rest, the latter, in their desire for a short working day, frequently demand that the rest periods be made as short as possible, without considering that in so doing they are acting against their own interests. In order to prevent controversies on this subject the joint council (*Arbeitsgemeinschaft*) of German medical factory inspectors (*Gewerbeärzte*) makes the following recommendations as to rest periods:

(1) Any work, whether physical or intellectual, of protracted duration should be broken by rest periods. If this is not done, fatigue increases disproportionately while efficiency decreases considerably. The necessity of rest periods has been demonstrated by scientific investigations and practical experience.

(2) The necessary rest periods should be granted during the working day. It is undesirable, from the physiological standpoint, to dispense with rest periods during the working day on the assumption that the workers can get sufficient rest after the close of work. The time at which rest periods are to be granted and their duration depend on the nature and duration of the work, and frequently also on external circumstances (such as train connections, etc.).

(3) Normally the working efficiency decreases at noontime, the physiologic curve showing a depression at this hour. Noon is therefore naturally the best time for the principal rest period, which should be at least one hour, provided the place where the worker eats is not too distant from his working place. If the worker has to go some distance to his eating place, the rest period should be correspondingly lengthened. A longer rest period should also be granted to workers handling poisonous substances, so that they may have ample time to wash and change their clothes.

Lunch rooms, comfortably furnished, should be established in the proximity of the working place for those workers who live too far away to be able to eat their lunch at home.

(4) The undivided working-day is a product of the large cities. It has certain apparent advantages but also considerable physiological disadvantages. An essential for the undivided working-day is a nutritious breakfast before work and a short rest period at lunch time. Lunch should include some hot dish.

(5) Certain secondary rest periods are also necessary. Such short interruptions or slowing down of work are incidental to some labor processes. Where such is not the case two short rest periods of 10 to 15 minutes each should be granted, one in the morning and the other in the afternoon. The time and duration of these will depend on the special working conditions. If the working-day begins early and the workers have to walk a long distance to their work, an earlier and longer rest should be granted during the forenoon. So-called "short hours" (50 minutes' work and 10 minutes' rest) may also be suitable under certain circumstances.

¹ Mitteilungen der Arbeitgeberverbände Unterelbe und Hamburg-Altona. Hamburg, Feb. 1, 1925.

(6) The present-day custom of shortening the rest periods as much as possible or of dispensing with them altogether is contrary to all physiological principles and constitutes exploitation of the working force. This is true not only of adult healthy male workers but in a still higher degree of weak and sickly and female and juvenile workers.

(7) Observance of the above principles will preserve the working capacity and increase the output and earning capacity of the workers. Nonobservance will lead to insufficient relief from fatigue, premature exhaustion, and dissipation of the most valuable possession of the worker, his working capacity.

The German medical factory inspectors consider it their duty to request the observance of these principles. It is also the duty of the workers themselves to oppose energetically any irrational shortening or elimination of rest periods.

An Experiment in Mine Management in Wales

NORTH WALES is the scene of a novel experiment, recently undertaken, to see what can be done with an unprofitable mine when the element of profits is eliminated. According to the Manchester Guardian, which in its issue for March 14, 1925, gives the details of the scheme, mining in this region is a doubtful venture.

The North Wales coal field is a classical example of a field in which output is low through physical causes, and the wages under the national agreement can only be paid, when trade is bad, at the expense of profits. In 1923 the output per man per annum was 192 tons lower than in any other district, except Cumberland and Bristol.

For some time past, losses have been heavy, and the owners of one mine, the Vauxhall Colliery at Ruabon, feeling that they could not afford to carry on longer, had decided to close down early in March until trade should improve. This would throw 700 men out of employment and affect unfavorably the general prosperity of the neighborhood. As a means of avoiding this, it was proposed that the owners should turn the mine over to the men for three months to see what they could do with it, and this proposition was accepted. Two important features of the plan are given, as follows:

The owners of the colliery consent to hand over the mine to the control of the managers and men, waiving all ownership claims, and taking no profits, if any, during the time of the experiment, which will be for three months.

The manager guarantees to the owners that they shall be absolved from any loss incurred by the experiment.

To cover any losses, the men are collecting a guaranty fund, which is to be deposited in a local bank in the name of three trustees, and is not to be touched unless actual losses occur. Any profits which may be made are to be added to the fund to provide against future losses. Within less than a week after the plan was decided upon, £300¹ had been subscribed to this fund.

Wage rates are to be revised, as a part of the scheme, though they are not to be reduced below the rates current in the district. The men are also to put in as much time at the coal face as they can possibly do without a breach of the seven hours act. Naturally a man will work with more enthusiasm when the full benefit of the increased effort accrues directly to himself and his fellows, and apparently the promoters of the scheme are trusting to this fact and to the elimination of profits to put the mine in a position to pay the cost of operation, including wages.

¹ Pound at par=\$4.8665; exchange rate varies.

PRICES AND COST OF LIVING

Retail Prices of Food in the United States

THE following tables are based on figures which have been received by the Bureau of Labor Statistics from retail dealers through monthly reports of actual selling prices.¹

Table 1 shows for the United States retail prices of food for March 15, 1924, and February 15 and March 15, 1925, as well as the percentage changes in the year and in the month. For example, the price per dozen of eggs, strictly fresh, was 34.8 cents in March, 1924; 53.4 cents in February, 1925; and 39.1 cents in March, 1925. These figures show an increase of 12 per cent in the year, but a decrease of 27 per cent in the month.

The cost of the various articles of food combined shows an increase of 5.2 per cent March 15, 1925, as compared with March 15, 1924, and a decrease of 0.3 per cent March 15, 1925, as compared with February 15, 1925.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE MARCH 15, 1925, COMPARED WITH MARCH 15, 1924, AND FEBRUARY 15, 1925

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers]

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (−) Mar. 15, 1925, compared with—	
		Mar. 15, 1924	Feb. 15, 1925	Mar. 15, 1925	Mar. 15, 1924	Feb. 15, 1925
		<i>Cents</i>	<i>Cents</i>	<i>Cents</i>		
Sirloin steak.....	Pound.....	38.9	38.5	39.6	+2	+3
Round steak.....	do.....	33.1	32.7	33.6	+2	+3
Rib roast.....	do.....	28.6	28.4	29.1	+2	+2
Chuck roast.....	do.....	20.6	20.4	21.0	+2	+3
Plate beef.....	do.....	13.3	13.2	13.6	+2	+3
Perk chops.....	do.....	26.9	30.3	37.4	+39	+23
Bacon.....	do.....	36.3	40.6	44.4	+22	+9
Ham.....	do.....	43.6	48.1	51.2	+17	+6
Lamb, leg of.....	do.....	37.1	38.3	39.0	+5	+2
Hens.....	do.....	35.9	36.1	36.9	+3	+2
Salmon, canned.....	do.....	31.1	31.4	31.2	+0.3	−1
Milk, fresh.....	Quart.....	13.9	13.9	13.8	−1	−1
Milk, evaporated.....	15-16 oz. can.....	12.1	11.2	11.2	−7	0
Butter.....	Pound.....	58.0	50.6	55.5	−4	+10
Oleomargarine.....	do.....	30.6	31.3	31.1	+2	−1
Nut margarine.....	do.....	28.9	29.5	29.5	+2	0
Cheese.....	do.....	36.7	36.4	36.5	−1	+0.3
Lard.....	do.....	17.5	22.8	23.1	+32	+1
Vegetable lard substitute.....	do.....	24.5	25.8	25.8	+5	0
Eggs, strictly fresh.....	Dozen.....	34.8	53.4	39.1	+12	−27
Bread.....	Pound.....	8.7	9.5	9.4	+8	−1
Flour.....	do.....	4.6	6.4	6.4	+39	0
Corn meal.....	do.....	4.4	5.5	5.5	+25	0
Rolled oats.....	do.....	8.8	9.2	9.2	+5	0
Corn flakes.....	8-oz. pkg.....	9.7	11.0	11.1	+14	+1

¹ In addition to monthly retail prices of food and coal, the bureau secures prices of gas and electricity from each of 51 cities. These prices are published at quarterly intervals in the MONTHLY LABOR REVIEW. Retail prices of dry goods were published quarterly until November, 1923.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE MARCH 15, 1925, COMPARED WITH MARCH 15, 1924, AND FEBRUARY 15, 1925—Continued

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (—) Mar. 15, 1925, compared with—	
		Mar. 15, 1924	Feb. 15, 1925	Mar. 15, 1925	Mar. 15, 1924	Feb. 15, 1925
		<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>		
Wheat cereal.....	28-oz. pkg.....	24.3	24.6	24.7	+2	+0.4
Macaroni.....	Pound.....	19.5	20.3	20.4	+5	+0.4
Rice.....	do.....	9.7	10.8	10.9	+12	+1
Beans, navy.....	do.....	9.9	10.4	10.4	+5	0
Potatoes.....	do.....	2.8	2.6	2.5	-11	-4
Onions.....	do.....	5.9	6.3	6.3	+7	0
Cabbage.....	do.....	6.2	5.0	5.2	-16	+4
Beans, baked.....	No. 2 can.....	12.8	12.6	12.6	-2	0
Corn, canned.....	do.....	15.7	17.7	17.9	+14	+1
Peas, canned.....	do.....	18.0	18.5	18.5	+3	0
Tomatoes, canned.....	do.....	12.9	13.8	13.9	+8	+1
Sugar, granulated.....	Pound.....	10.4	7.7	7.7	-26	0
Tea.....	do.....	70.9	74.8	75.1	+6	+0.4
Coffee.....	do.....	40.8	52.1	52.3	+28	+0.4
Prunes.....	do.....	17.8	17.1	17.3	-3	+1
Raisins.....	do.....	15.7	14.6	14.6	-7	0
Bananas.....	Dozen.....	39.0	36.8	37.6	-4	+2
Oranges.....	do.....	38.3	44.7	48.3	+26	+8
All articles combined.....					+5.2	-0.3

Table 2 shows for the United States average retail prices of specified food articles on March 15, 1913, and on March 15 of each year from 1919 to 1925, together with percentage changes in March of each of these specified years, compared with March, 1913. For example, the price per pound of flour was 3.3 cents per pound in March, 1913; 6.8 cents in March, 1919; 8 cents in March, 1920; 6.4 cents in March, 1921; 5.3 cents in March, 1922; 4.8 cents in March, 1923; 4.6 cents in March, 1924, and 6.4 cents in March, 1925.

As compared with the average price in March, 1913, these figures show the following increases: 106 per cent in March, 1919; 142 per cent in March, 1920; 94 per cent in March, 1921; 61 per cent in March, 1922; 45 per cent in March, 1923; 39 per cent in March, 1924; and 94 per cent in March, 1925.

The cost of the various articles of food combined showed an increase of 55.9 per cent in March, 1925, as compared with March, 1913.

TABLE 2.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE, MARCH 15 OF CERTAIN SPECIFIED YEARS COMPARED WITH MARCH 15, 1913

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers]

Article	Unit	Average retail price on Mar. 15—								Per cent of increase Mar. 15 of each specified month, compared with Mar. 15, 1913						
		1913	1919	1920	1921	1922	1923	1924	1925	1919	1920	1921	1922	1923	1924	1925
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.							
Sirloin steak	Pound	24.7	41.8	40.8	39.1	35.9	37.3	38.9	39.6	69	65	58	45	51	57	60
Round steak	do	21.3	39.4	37.5	39.4	30.8	31.7	33.1	33.6	85	76	64	45	49	55	58
Rib roast	do	19.4	33.4	31.9	30.0	27.0	27.6	28.6	29.1	72	64	55	39	42	47	50
Chuck roast	do	15.6	28.4	25.1	22.5	19.3	19.5	20.6	21.0	82	61	44	24	25	32	35
Plate beef	do	11.8	22.1	18.2	15.7	13.0	12.8	13.3	13.6	87	54	33	10	8	13	15
Pork chops	do	20.3	38.6	39.1	35.3	31.3	28.3	26.9	37.4	90	93	74	54	39	33	84
Bacon	do	26.1	54.9	50.2	41.9	39.0	39.2	36.3	44.4	110	92	61	49	50	39	70
Ham	do	26.0	51.4	51.2	48.8	49.8	45.0	43.6	51.2	98	97	88	92	73	68	97
Lamb	do	19.1	38.0	39.8	34.4	37.5	36.0	37.1	39.0	99	108	80	96	88	94	104
Hens	do	21.4	41.1	45.7	43.2	37.8	35.8	35.9	56.9	92	114	102	77	67	68	72
Salmon, canned, red	do	122.1	137.6	138.8	132.6	131.2	131.1	131.2								
Milk, fresh	Quart	8.9	15.3	16.6	15.2	13.0	13.6	13.9	13.8	72	87	71	46	53	56	55
Milk, evaporated	(²)	15.3	15.1	14.6	11.3	12.2	12.1	11.2								
Butter	Pound	41.4	66.5	75.2	57.6	45.8	57.6	58.0	55.5	61	82	39	11	39	40	34
Oleomargarine	do		39.0	43.1	34.0	27.9	29.0	30.6	31.1							
Nut margarine	do		35.5	36.1	31.0	27.0	27.4	28.9	29.5							
Cheese	do	22.1	40.5	42.8	39.0	33.0	37.1	36.7	36.5	83	94	76	49	68	66	65
Lard	do	15.6	33.4	30.4	19.6	17.3	17.4	17.5	23.1	114	95	26	11	12	12	48
Vegetable lard substitute	do		33.2	37.5	24.6	21.9	22.4	24.5	25.8							
Eggs, strictly fresh	Dozen	26.4	48.3	55.6	41.7	31.8	38.5	34.8	39.1	83	111	58	20	46	32	48
Bread	Pound	5.6	9.8	11.2	10.5	8.7	8.7	8.7	9.4	75	100	88	55	55	55	
Flour	do	3.3	6.8	8.0	6.4	5.3	4.8	4.6	6.4	106	142	94	61	45	39	94
Corn meal	do	2.9	5.9	6.5	4.8	3.9	4.0	4.4	5.5	103	124	66	34	38	52	90
Rolled oats	do		8.3	10.3	10.2	8.8	8.8	8.8	9.2							
Corn flakes	(³)		14.1	14.1	13.2	10.2	9.7	9.7	11.1							
Wheat cereal	(⁴)		25.1	29.7	20.9	26.0	24.7	24.3	24.7							
Macaroni	Pound		19.3	20.2	21.0	20.2	19.8	19.5	20.4							
Rice	do	8.6	13.4	18.4	9.8	9.3	9.4	9.7	10.9	56	114	14	8	9	13	27
Beans, navy	do		12.5	11.9	8.4	8.9	11.4	9.9	10.4							
Potatoes	do	1.5	2.9	6.8	2.5	3.1	2.2	2.8	2.5	93	353	67	107	47	87	67
Onions	do		6.0	9.4	3.8	11.6	5.4	5.9	6.3							
Cabbage	do		5.3	8.7	4.2	5.4	6.6	6.2	5.2							
Beans, baked	(⁵)		18.1	16.8	15.1	13.2	13.0	12.8	12.6							
Corn, canned	(⁶)		19.3	18.5	16.7	15.7	15.4	15.7	17.9							
Peas, canned	(⁷)		19.0	19.0	18.0	17.7	17.4	18.0	18.5							
Tomatoes, canned	(⁸)		16.4	15.1	11.8	13.6	12.9	12.9	13.9							
Sugar, granulated	Pound	5.4	10.6	18.7	9.7	6.5	10.2	10.4	7.7	96	246	80	20	89	93	43
Tea	do	54.3	70.4	73.2	71.1	67.5	68.9	70.9	75.1	30	35	31	24	27	31	38
Coffee	do	29.8	37.6	49.1	37.1	35.6	37.9	40.8	52.3	26	65	24	19	27	37	76
Prunes	do		20.9	28.7	20.9	19.2	19.8	17.8	17.3							
Raisins	do		16.4	26.4	31.7	24.6	18.4	15.7	14.6							
Bananas	Dozen		36.6	41.4	41.6	36.9	36.7	39.0	37.6							
Oranges	do		53.2	62.0	43.7	53.9	47.9	38.3	48.3							
All articles combined ⁹										80.8	106.2	61.0	43.1	46.4	48.2	55.9

¹ Both pink and red.

² 15-16-ounce can.

³ 8-ounce package.

⁴ 28-ounce package.

⁵ No. 2 can.

⁶ The following 22 articles, weighted according to the consumption of the average family, have been used from January, 1913, to December, 1920: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee, and tea. The remainder of the 43 articles shown in Tables 1 and 2 have been included in the weighted aggregates for each month beginning with January, 1921.

Table 3 shows the changes in the retail prices of each of 22 articles of food² as well as the changes in the amounts of these articles that could be purchased for \$1 in each year, 1913 to 1925, and in March, 1925.

² Although monthly prices on 43 food articles have been secured since January, 1919, prices on only 22 of these articles have been secured each month since 1913.

TABLE 3.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR \$1 IN EACH YEAR, 1913 TO 1925, AND IN MARCH, 1925

Year	Sirloin steak		Round steak		Rib roast		Chuck roast		Plate beef		Pork chops	
	Average retail price	Amt. for \$1	Average retail price	Amt. for \$1	Average retail price	Amt. for \$1	Average retail price	Amt. for \$1	Average retail price	Amt. for \$1	Average retail price	Amt. for \$1
	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.
1913.....	\$0.254	3.9	\$0.223	4.5	\$0.198	5.1	\$0.160	6.3	\$0.121	8.3	\$0.210	4.8
1914.....	.259	3.9	.236	4.2	.204	4.9	.167	6.0	.126	7.9	.220	4.5
1915.....	.257	3.9	.230	4.3	.201	5.0	.161	6.2	.121	8.3	.203	4.9
1916.....	.273	3.7	.245	4.1	.212	4.7	.171	5.8	.128	7.8	.227	4.4
1917.....	.315	3.2	.290	3.4	.249	4.0	.209	4.8	.157	6.4	.319	3.1
1918.....	.389	2.6	.369	2.7	.307	3.3	.266	3.8	.206	4.9	.390	2.6
1919.....	.417	2.4	.389	2.6	.325	3.1	.270	3.7	.202	5.0	.423	2.4
1920.....	.437	2.3	.395	2.5	.332	3.0	.262	3.8	.183	5.5	.423	2.4
1921.....	.388	2.6	.344	2.9	.291	3.4	.212	4.7	.143	7.0	.349	2.9
1922.....	.374	2.7	.323	3.1	.276	3.6	.197	5.1	.128	7.8	.330	3.0
1923.....	.391	2.6	.335	3.0	.284	3.5	.202	5.0	.129	7.8	.304	3.3
1924.....	.396	2.5	.338	3.0	.288	3.5	.208	4.8	.132	7.6	.308	3.2
1925: March.....	.396	2.5	.336	3.0	.291	3.4	.210	4.8	.136	7.4	.374	2.7
	Bacon		Ham		Lard		Hens		Eggs		Butter	
	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per doz.	Dozs.	Per lb.	Lbs.
1913.....	\$0.270	3.7	\$0.269	3.7	\$0.158	6.3	\$0.213	4.7	\$0.345	2.9	\$0.383	2.6
1914.....	.275	3.6	.273	3.7	.156	6.4	.218	4.6	.353	2.8	.362	2.8
1915.....	.269	3.7	.261	3.8	.148	6.8	.208	4.8	.341	2.9	.358	2.8
1916.....	.287	3.5	.294	3.4	.175	5.7	.236	4.2	.375	2.7	.394	2.5
1917.....	.410	2.4	.382	2.6	.276	3.6	.286	3.5	.481	2.1	.487	2.1
1918.....	.529	1.9	.479	2.1	.333	3.0	.377	2.7	.569	1.8	.577	1.7
1919.....	.554	1.8	.534	1.9	.369	2.7	.411	2.4	.628	1.6	.678	1.5
1920.....	.523	1.9	.555	1.8	.295	3.4	.447	2.2	.681	1.5	.701	1.4
1921.....	.427	2.3	.488	2.0	.180	5.6	.397	2.5	.509	2.0	.517	1.9
1922.....	.398	2.5	.488	2.0	.170	5.9	.360	2.8	.444	2.3	.479	2.1
1923.....	.391	2.6	.455	2.2	.177	5.6	.350	2.9	.465	2.2	.554	1.8
1924.....	.377	2.7	.453	2.2	.190	5.3	.353	2.8	.478	2.1	.517	1.9
1925: March.....	.444	2.3	.512	2.0	.231	4.3	.369	2.7	.391	2.6	.555	1.8
	Cheese		Milk		Bread		Flour		Corn meal		Rice	
	Per lb.	Lbs.	Per qt.	Qts.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.
1913.....	\$0.221	4.5	\$0.089	11.2	\$0.056	17.9	\$0.033	30.3	\$0.030	33.3	\$0.087	11.5
1914.....	.229	4.4	.089	11.2	.063	15.9	.034	29.4	.032	31.3	.088	11.4
1915.....	.233	4.3	.088	11.4	.070	14.3	.042	23.8	.033	30.3	.091	11.0
1916.....	.258	3.9	.091	11.0	.073	13.7	.044	22.7	.034	29.4	.091	11.0
1917.....	.332	3.0	.112	9.0	.092	10.9	.070	14.3	.058	17.2	.104	9.6
1918.....	.359	2.8	.139	7.2	.098	10.2	.067	14.9	.068	14.7	.129	7.8
1919.....	.426	2.3	.155	6.5	.100	10.0	.072	13.9	.064	15.6	.151	6.6
1920.....	.416	2.4	.167	6.0	.115	8.7	.081	12.3	.065	15.4	.174	5.7
1921.....	.340	2.9	.146	6.8	.099	10.1	.058	17.2	.045	22.2	.095	10.5
1922.....	.329	3.0	.131	7.6	.087	11.5	.051	19.6	.039	25.6	.095	10.5
1923.....	.369	2.7	.138	7.2	.087	11.5	.047	21.3	.041	24.4	.095	10.5
1924.....	.353	2.8	.138	7.2	.088	11.4	.049	20.4	.047	21.3	.101	9.9
1925: March.....	.365	2.7	.138	7.2	.094	10.6	.064	15.6	.055	18.2	.109	9.2
	Potatoes		Sugar		Coffee		Tea					
	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.				
1913.....	\$0.017	58.8	\$0.055	18.2	\$0.298	3.4	\$0.544	1.8				
1914.....	.018	55.6	.059	16.9	.297	3.4	.546	1.8				
1915.....	.015	66.7	.066	15.2	.300	3.3	.545	1.8				
1916.....	.027	37.0	.080	12.5	.299	3.3	.546	1.8				
1917.....	.043	23.3	.093	10.8	.302	3.3	.582	1.7				
1918.....	.032	31.3	.097	10.3	.305	3.3	.648	1.5				
1919.....	.038	26.3	.113	8.8	.433	2.3	.701	1.4				
1920.....	.063	15.9	.194	5.2	.470	2.1	.733	1.4				
1921.....	.031	32.3	.080	12.5	.363	2.8	.697	1.4				
1922.....	.028	35.7	.073	13.7	.361	2.8	.681	1.5				
1923.....	.029	34.5	.101	9.9	.377	2.7	.695	1.4				
1924.....	.027	37.0	.092	10.9	.433	2.3	.715	1.4				
1925: March.....	.025	40.0	.077	13.0	.523	1.9	.751	1.3				

Index Numbers of Retail Prices of Food in the United States

IN TABLE 4 index numbers are given which show the changes in the retail prices of each of 22 food articles,³ by years from 1907 to 1924, and by months for 1924⁴ and for January, February, and March, 1925. These index numbers, or relative prices, are based on the year 1913 as 100 and are computed by dividing the average price of each commodity for each month and each year by the average price of that commodity for 1913. These figures must be used with caution. For example, the relative price of rib roast for the year 1923 was 143.4, which means that the average money price for the year 1923 was 43.4 per cent higher than the average money price for the year 1913. The relative price of rib roast for the year 1922 was 139.4, which figures show an increase of 4 points but an increase of slightly less than 3 per cent in the year.

In the last column of Table 4 are given index numbers showing the changes in the retail cost of all articles of food combined. From January, 1913, to December, 1920, 22 articles have been included in the index, and beginning with January, 1921, 43 articles have been used.⁴ For an explanation of the method used in making the link between the cost of the market basket of 22 articles, weighted according to the average family consumption in 1901, and the cost of the market basket based on 43 articles and weighted according to the consumption in 1918, see MONTHLY LABOR REVIEW for March, 1921 (p. 25).

The curve shown in the chart on page 44 pictures more readily to the eye the changes in the cost of the food budget than do the index numbers given in the table. The chart has been drawn on the logarithmic scale, because the percentages of increase or decrease are more accurately shown than on the arithmetic scale.

³ See note 6, p. 40.

⁴ For index numbers of each month, January, 1913, to December, 1920, see MONTHLY LABOR REVIEW for February, 1921, pp. 19-21, and for each month of 1921 and 1922 see MONTHLY LABOR REVIEW of February, 1923, p. 69.

Commodity	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
Bacon	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Butter	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Cheese	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Eggs	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Flour	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Meat	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Milk	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oil	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Rice	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sugar	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Wheat	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Yeast	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Other	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
All articles	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

TABLE 4.—INDEX NUMBERS SHOWING CHANGES IN THE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES, BY YEARS 1907 TO 1924, BY MONTHS FOR 1924 AND JANUARY TO MARCH, 1925

[Average for year 1913=100]

Year and month	Sir- loin steak	Round steak	Rib roast	Chuck roast	Plate beef chops	Ba- con	Ham	Lard	Hens	Eggs	But- ter	Cheese	Milk	Bread	Flour	Corn meal	Rice	Po- ta- toes	Sugar	Cof- fee	Tea	All arti- cles
1907	71.5	68.0	76.1	74.3	74.4	74.4	75.7	80.7	81.4	84.1	85.3	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	82.0
1908	73.3	71.2	78.1	76.1	76.9	76.9	77.6	80.5	83.0	86.1	85.5	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	84.3
1909	76.6	73.5	81.3	82.7	82.9	82.9	82.0	90.1	88.5	92.6	90.1	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	88.7
1910	80.3	77.9	84.6	85.1	91.6	91.6	89.3	88.4	91.0	93.5	93.9	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	93.0
1911	80.6	78.7	84.8	85.1	91.3	91.3	89.3	88.4	91.0	93.5	93.9	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	92.0
1912	91.0	89.3	93.6	91.2	90.5	90.5	90.6	93.5	93.5	98.9	97.7	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.6
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1914	102.0	105.8	103.0	104.4	104.1	104.1	101.7	98.6	102.2	102.3	94.4	103.6	103.6	103.6	103.6	103.6	103.6	103.6	103.6	103.6	103.6	102.4
1915	101.1	103.0	101.4	100.6	100.0	99.8	97.2	93.4	97.5	98.7	93.4	105.0	99.2	125.0	125.8	108.4	104.3	88.9	120.1	100.6	100.2	101.3
1916	107.5	109.7	107.4	106.9	106.0	106.4	109.2	111.0	110.7	108.8	103.0	116.7	102.2	130.4	134.6	112.6	104.6	158.8	146.4	100.3	100.4	113.7
1917	124.0	129.8	125.5	130.6	129.8	151.7	142.2	174.9	139.4	151.9	127.2	164.3	125.4	164.3	211.2	192.2	119.0	252.7	169.3	101.4	106.9	146.4
1918	153.2	165.5	165.1	166.3	170.2	185.7	195.9	178.1	210.8	177.0	164.9	150.7	162.4	156.2	175.0	203.0	226.7	188.2	176.4	102.4	119.1	168.3
1919	164.2	174.4	164.1	168.8	166.9	201.4	205.2	233.5	193.0	182.0	177.0	192.8	174.2	178.6	218.2	213.3	173.6	223.5	205.5	145.3	128.9	185.9
1920	172.1	177.1	167.7	163.8	151.2	201.4	193.7	183.0	197.4	183.0	188.2	187.6	188.2	205.4	243.5	216.7	200.0	370.6	352.7	157.7	134.7	203.4
1921	152.8	154.3	147.0	132.5	118.2	166.2	158.2	181.4	113.9	186.4	147.5	135.0	148.9	176.8	175.8	150.0	109.2	182.4	145.5	121.8	128.1	153.3
1922	147.2	144.8	139.4	123.1	105.8	157.1	147.4	181.4	107.6	169.0	128.7	135.1	148.9	155.4	154.5	130.0	109.2	164.7	132.7	121.1	125.2	141.6
1923	153.0	150.2	143.4	128.3	106.6	144.8	149.1	112.0	164.3	134.8	144.7	167.0	155.1	155.4	142.4	136.7	109.2	170.6	183.6	126.5	127.8	146.2
1924:	155.9	151.6	145.5	130.0	109.1	146.7	139.6	120.3	165.7	138.6	135.0	159.7	155.1	157.1	148.5	156.7	116.1	158.8	167.3	145.3	131.4	145.9
January	153.9	149.3	144.4	129.4	109.9	130.5	137.8	166.2	118.4	162.0	158.3	160.1	169.2	159.6	155.4	146.7	112.6	164.7	185.5	128.2	130.5	149.1
February	152.4	148.0	142.9	127.5	109.9	127.1	135.6	165.1	113.9	164.8	144.3	157.2	168.3	157.3	155.4	139.4	146.7	112.6	164.7	187.3	130.2	147.3
March	153.1	148.4	144.4	128.8	109.9	128.1	134.4	163.6	108.5	100.9	151.4	168.1	156.2	155.4	139.4	146.7	111.5	164.7	189.1	136.9	130.3	143.7
April	155.9	150.7	146.5	130.6	109.9	136.7	134.1	164.7	108.9	93.0	130.8	161.1	155.1	155.4	139.4	146.7	112.6	164.7	180.0	140.3	130.5	141.3
May	159.8	155.2	148.5	133.1	110.7	142.4	133.7	164.7	108.2	171.8	95.1	120.4	156.6	152.8	155.4	139.4	146.7	113.8	170.6	167.3	141.6	141.0
June	160.2	156.1	148.5	132.5	109.1	143.8	134.1	165.8	107.0	168.5	104.6	126.9	155.7	151.7	155.4	139.4	146.7	113.8	194.1	150.9	141.9	142.4
July	160.2	155.2	147.0	131.3	108.3	144.3	134.8	166.2	108.2	165.7	114.2	129.2	155.7	151.7	155.4	145.5	150.0	114.9	194.1	152.7	142.3	143.3
August	160.2	156.1	147.0	131.3	108.3	165.7	141.9	173.2	122.2	163.4	129.3	126.1	155.7	153.9	157.1	154.5	156.7	117.2	152.9	149.1	145.6	144.2
September	158.3	153.8	146.5	130.6	109.1	170.5	145.6	174.3	126.6	165.7	150.4	126.6	156.6	156.2	157.1	154.5	160.0	118.4	152.9	156.4	148.7	146.8
October	155.9	151.1	144.4	129.4	108.3	178.6	148.5	175.1	135.4	164.8	173.0	125.1	157.5	156.2	157.1	160.6	166.7	119.5	141.2	160.0	154.7	148.7
November	152.4	147.5	142.4	127.5	109.1	150.5	174.7	141.8	162.0	197.4	127.7	157.0	155.1	158.9	163.6	170.0	120.7	129.4	160.0	164.4	135.1	150.1
December	150.4	145.3	141.4	126.3	108.3	139.5	147.8	173.2	139.9	161.5	202.3	137.1	157.9	155.1	158.9	169.7	173.3	121.8	135.3	160.0	169.5	151.5
1925:	152.4	147.1	143.9	128.1	109.9	146.2	149.6	177.0	144.3	168.1	136.6	162.4	156.2	164.3	181.8	180.0	123.0	147.1	147.3	173.2	136.4	154.3
January	151.6	146.6	143.4	127.5	109.1	144.3	150.4	178.8	144.3	169.5	154.8	132.1	164.7	156.2	169.6	193.9	183.3	124.1	152.9	140.0	174.8	151.4
February	155.9	150.7	147.0	131.3	112.4	178.1	164.4	190.3	146.2	173.2	113.3	144.9	165.2	155.1	167.9	193.9	183.3	125.3	147.1	140.0	176.5	151.1
March	155.9	150.7	147.0	131.3	112.4	178.1	164.4	190.3	146.2	173.2	113.3	144.9	165.2	155.1	167.9	193.9	183.3	125.3	147.1	140.0	176.5	151.1

TREND IN RETAIL PRICES OF FOOD IN THE UNITED STATES, JANUARY, 1916, TO MARCH, 1925

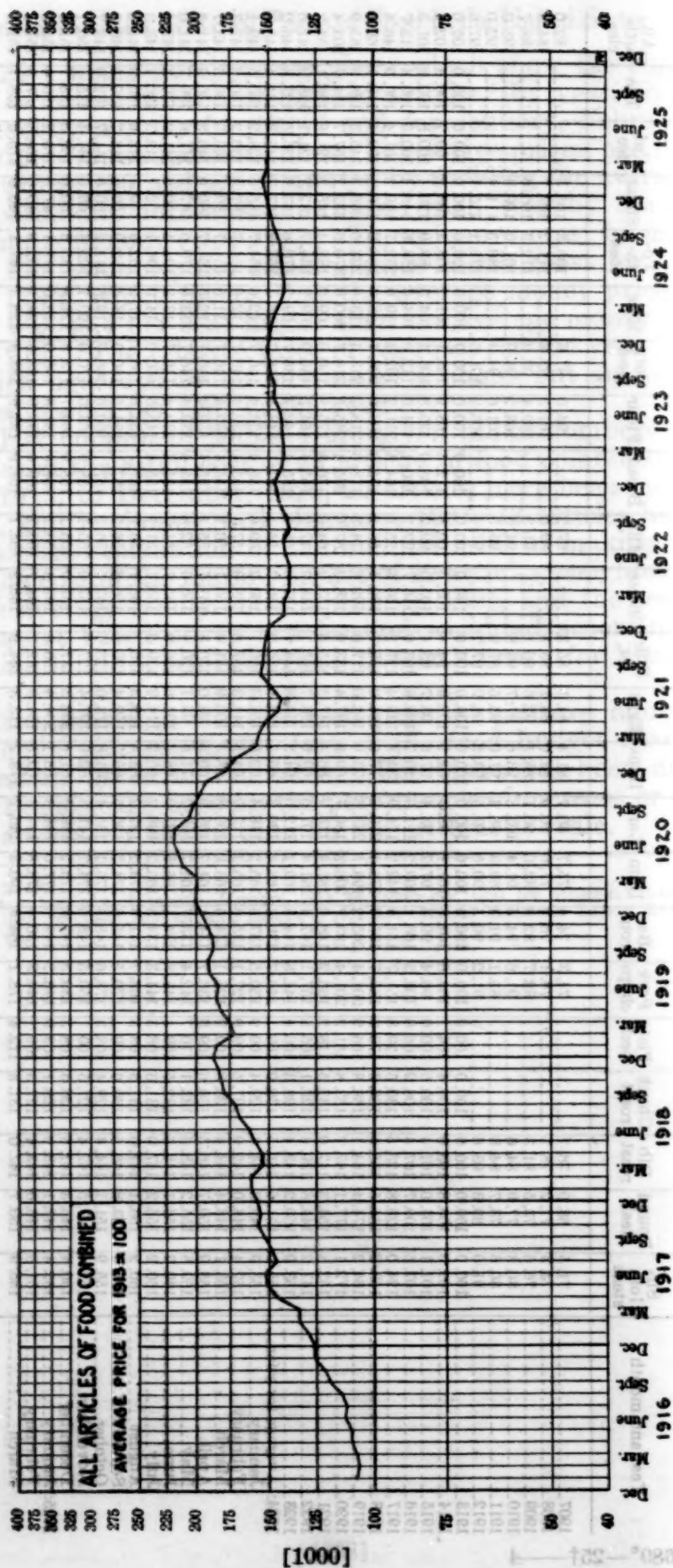


TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL

[Owing to differences in trade practices in the cities included in this report exact comparison of prices in the prices shown in this table are computed from reports sent monthly to the bureau by retail dealers,

Article	Unit	Atlanta, Ga.				Baltimore, Md.				Birmingham, Ala.			
		Mar. 15—		Feb.	Mar.	Mar. 15—		Feb.	Mar.	Mar. 15—		Feb.	Mar.
				15,	15,			15,	15,			15,	15,
		1913	1924	1925	1925	1913	1924	1925	1925	1913	1924	1925	1925
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak.....	Pound.....	22.6	35.0	36.3	37.5	22.0	37.3	37.6	38.7	24.9	36.3	37.5	37.8
Round steak.....	do.....	20.5	30.9	32.2	33.4	20.7	33.7	33.3	34.4	21.3	32.7	33.3	33.4
Rib roast.....	do.....	18.4	26.1	27.3	28.3	18.0	30.0	30.2	31.1	19.3	26.4	27.4	27.6
Chuck roast.....	do.....	13.0	19.9	20.2	21.0	15.3	20.1	20.5	21.0	16.1	21.0	21.6	22.0
Plate beef.....	do.....	11.1	11.7	12.5	12.9	12.4	12.9	13.9	14.1	10.5	13.6	13.2	13.6
Pork chops.....	do.....	21.5	24.5	29.4	35.9	19.3	24.7	29.5	36.3	20.0	25.8	30.0	35.6
Bacon, sliced.....	do.....	31.0	32.8	38.0	41.7	22.0	32.1	36.5	40.1	31.3	37.7	41.4	43.5
Ham, sliced.....	do.....	29.0	43.8	49.1	52.2	30.0	48.2	51.0	55.5	30.0	43.6	47.9	50.8
Lamb, leg of.....	do.....	20.6	34.4	35.7	37.1	18.3	37.7	39.6	40.5	21.3	36.4	37.8	38.5
Hens.....	do.....	19.3	32.7	33.0	32.9	21.8	38.9	38.7	39.1	18.7	31.9	33.3	34.3
Salmon, canned, red.....	do.....		29.3	31.9	32.1		26.3	27.7	27.6		30.3	31.3	31.9
Milk, fresh.....	Quart.....	10.0	17.7	16.0	16.0	8.8	13.0	13.0	13.0	10.3	18.5	19.0	19.0
Milk, evaporated.....	15-16 oz. can.....		14.1	13.1	13.1		11.8	10.9	10.8		13.2	12.6	12.6
Butter.....	Pound.....	42.4	58.4	55.1	56.8	42.1	63.4	54.8	59.8	45.0	62.1	55.8	58.6
Oleomargarine.....	do.....		33.1	33.3	32.6		28.3	29.0	29.2		31.5	37.8	37.9
Nut margarine.....	do.....		28.0	30.0	29.5		27.0	27.4	27.8		33.6	34.1	34.1
Cheese.....	do.....	25.0	35.3	35.2	35.1	23.3	36.5	36.1	36.3	21.8	36.6	36.9	36.8
Lard.....	do.....	14.8	17.1	22.8	23.1	14.0	16.7	21.0	21.9	15.4	17.5	23.6	24.1
Vegetable lard substitute.....	do.....		22.9	25.1	25.1		24.4	25.1	25.2		20.9	21.8	22.3
Eggs, strictly fresh.....	Dozen.....	20.9	32.6	46.5	33.5	21.7	34.5	55.2	36.4	25.5	33.1	51.7	37.5
Bread.....	Pound.....	6.0	9.1	10.3	10.2	5.4	8.8	9.1	9.2	5.0	8.8	10.4	10.4
Flour.....	do.....	3.6	5.4	6.9	6.9	3.2	4.3	6.1	5.9	3.8	5.5	7.2	7.2
Corn meal.....	do.....	2.4	3.7	4.6	4.7	2.5	3.5	4.4	4.4	2.1	3.5	4.6	4.6
Rolled oats.....	do.....		9.1	9.5	9.5		8.4	9.0	8.9		9.2	9.7	9.8
Corn flakes.....	8-oz. pkg.....		9.7	11.5	11.3		8.8	10.3	10.4		10.1	12.4	12.1
Wheat cereal.....	28-oz. pkg.....		26.5	25.4	25.4		22.8	22.9	23.0		25.9	25.9	25.6
Macaroni.....	Pound.....		21.0	21.5	22.0		18.9	19.2	19.2		19.2	19.5	19.6
Rice.....	do.....	8.6	8.8	10.1	10.0	9.0	9.7	10.4	10.4	8.2	9.7	11.2	11.0
Beans, navy.....	do.....		12.1	12.3	12.6		9.3	9.7	9.8		11.9	12.3	12.4
Potatoes.....	do.....	2.0	3.5	3.2	3.1	1.5	2.9	2.5	2.4	1.9	3.9	3.7	3.7
Onions.....	do.....		7.7	8.2	8.2		6.1	6.1	6.1		7.1	7.6	7.9
Cabbage.....	do.....		7.0	6.7	6.1		8.8	6.0	5.8		6.9	6.1	6.1
Beans, baked.....	No. 2 can.....		12.5	12.4	12.4		11.6	11.4	11.9		13.3	13.3	13.3
Corn, canned.....	do.....		16.0	17.7	17.3		14.9	17.1	17.3		16.5	18.8	18.8
Peas, canned.....	do.....		18.5	18.8	19.2		16.7	16.9	16.8		21.4	22.6	22.2
Tomatoes, canned.....	do.....		13.4	13.6	13.6		11.5	12.2	12.5		12.3	13.0	13.0
Sugar, granulated.....	Pound.....	5.6	10.9	8.5	8.1	5.1	10.0	7.0	7.0	5.2	10.6	8.5	8.2
Tea.....	do.....	60.0	93.1	96.0	97.2	56.0	69.4	71.3	72.6	61.3	86.2	90.6	91.7
Coffee.....	do.....	32.0	39.9	51.7	51.7	25.2	36.8	49.5	49.5	28.8	39.0	54.5	54.8
Prunes.....	do.....		18.5	16.9	17.1		17.2	16.0	16.1		20.2	19.5	19.7
Raisins.....	do.....		16.8	15.4	15.6		14.0	13.1	13.3		17.5	15.9	15.6
Bananas.....	Dozen.....		29.0	27.2	28.7		29.1	27.5	28.7		40.8	38.6	39.5
Oranges.....	do.....		31.8	32.8	39.0		35.8	44.3	48.0		36.2	40.9	48.5

¹ The steak for which prices are here quoted is called "sirloin" in this city, but in most of the cities included in this report, it would be known as "porterhouse" steak.

ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES

one city with those in another can not be made for some articles, particularly meats and vegetables. Also, and since some dealers occasionally fail to report, the number of quotations varies from month to month.

Boston, Mass.				Bridgeport, Conn.				Buffalo, N. Y.				Butte, Mont.			Charleston, S. C.			
Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	Mar. 15, 1924	Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	Mar. 15, 1924	Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	
1913	1924						1913	1924						1913	1924			
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	
34.6	62.9	60.6	62.0	45.7	46.6	46.7	22.0	36.7	36.8	38.3	27.4	28.0	28.5	21.0	34.0	32.7	33.2	
33.0	49.8	48.0	49.2	38.6	39.3	39.5	19.0	31.1	31.1	32.7	24.2	24.3	25.2	20.0	31.0	30.5	30.5	
23.4	38.6	37.8	37.9	34.9	34.9	35.5	17.3	27.8	28.3	29.3	22.0	23.6	24.5	19.3	27.5	26.4	27.7	
17.7	24.7	24.5	25.0	24.7	25.2	25.6	15.3	20.8	21.6	21.9	16.2	16.5	17.3	15.0	21.0	18.9	20.1	
-----	15.7	16.5	16.7	10.7	10.7	10.7	11.5	12.3	12.6	12.9	11.0	11.3	11.9	11.4	14.5	14.1	15.0	
22.2	29.9	32.5	39.0	28.5	31.9	39.0	19.3	27.3	32.1	41.2	24.2	27.3	35.0	23.0	27.0	30.0	33.2	
25.4	36.0	41.3	44.4	42.4	44.8	49.0	21.0	29.3	35.8	40.7	45.5	48.3	53.7	24.3	33.8	35.9	40.2	
28.8	49.3	53.5	56.4	49.1	53.1	58.0	25.0	44.6	46.3	50.3	49.5	51.5	55.0	26.7	41.3	44.7	47.8	
21.8	39.4	39.2	40.1	38.2	37.9	39.5	17.3	32.2	34.3	35.4	32.7	38.1	38.0	21.3	40.6	39.1	41.1	
24.2	39.6	39.4	39.9	39.7	39.7	39.9	21.7	36.9	38.9	39.2	30.3	31.1	31.8	21.8	35.0	34.4	36.5	
-----	29.5	30.4	30.3	29.2	28.6	28.9	-----	27.0	28.7	28.9	37.0	30.9	30.6	-----	26.8	30.1	29.9	
8.9	12.9	14.9	13.8	15.0	15.0	15.0	8.0	12.3	14.0	14.0	14.3	14.3	14.3	11.7	18.5	18.0	18.2	
-----	12.7	11.5	11.5	12.5	11.1	11.1	-----	11.7	11.0	11.0	11.8	10.9	10.9	-----	12.0	11.2	11.3	
41.4	60.4	50.4	54.2	59.0	50.8	53.7	40.6	57.7	49.4	56.8	54.7	47.7	49.9	40.4	58.4	49.9	55.1	
-----	30.5	34.2	34.2	30.0	31.4	31.0	-----	30.1	29.9	29.8	-----	-----	-----	-----	30.8	31.6	31.5	
-----	27.9	29.5	28.5	27.8	26.8	26.8	-----	28.1	29.3	28.8	33.5	32.7	32.7	-----	31.5	32.7	32.5	
22.4	39.8	38.0	37.6	38.9	37.7	38.2	21.5	36.3	36.8	37.5	40.0	35.7	35.8	21.0	34.3	33.1	33.5	
15.7	18.3	23.7	23.4	17.1	21.9	22.0	1.1	16.4	21.5	22.6	20.9	26.7	25.7	15.0	19.4	23.4	23.6	
-----	22.9	26.3	26.0	24.6	25.4	25.4	-----	23.8	25.8	26.0	26.7	28.4	27.6	-----	23.9	24.5	24.6	
32.8	49.6	70.7	55.4	46.0	71.4	48.9	7	37.7	58.8	42.5	37.5	50.3	45.7	26.3	34.1	54.8	34.9	
5.9	8.4	8.9	8.9	8.4	8.7	8.8	5.6	8.4	8.9	8.9	9.7	11.9	11.7	6.2	10.8	10.8	10.8	
3.7	5.1	7.1	6.9	4.7	6.6	6.5	2.9	4.4	6.2	6.2	5.0	6.8	6.8	3.7	5.8	7.5	7.5	
3.5	5.2	6.4	6.2	7.2	7.7	7.7	2.5	4.3	5.2	5.3	4.1	6.4	6.4	2.3	3.4	4.1	4.1	
-----	8.8	9.3	9.4	8.3	8.6	8.6	-----	7.9	8.4	8.8	6.7	7.8	7.8	-----	9.3	9.4	9.4	
-----	9.6	11.3	11.3	9.3	10.4	10.5	-----	8.9	10.4	10.4	12.1	12.1	12.3	-----	9.9	11.7	11.8	
-----	24.0	24.4	24.5	23.5	23.7	24.0	-----	24.0	24.3	24.0	27.9	26.9	26.8	-----	24.7	25.0	25.0	
-----	22.7	22.7	23.1	23.1	23.2	23.2	-----	20.8	21.4	22.2	20.8	19.6	19.6	-----	19.6	19.2	19.2	
9.2	11.2	11.5	11.6	10.1	11.2	11.1	9.3	9.7	10.3	10.5	10.1	11.2	11.6	5.6	7.0	8.5	8.8	
-----	10.2	10.8	10.8	10.8	10.7	10.8	-----	10.1	10.4	10.3	10.6	10.9	11.1	-----	10.9	11.1	11.1	
1.6	2.9	2.3	2.1	2.9	2.4	2.2	1.4	2.4	1.6	1.5	1.9	2.2	2.2	2.0	3.2	2.8	2.7	
-----	6.2	6.4	6.0	6.5	5.6	5.7	-----	7.1	5.9	6.4	5.2	6.0	6.8	-----	6.6	6.9	7.4	
-----	8.2	5.9	6.5	7.2	5.5	6.2	-----	5.6	3.2	4.7	6.9	7.4	7.5	-----	6.7	4.4	4.4	
-----	14.5	14.0	13.9	12.4	11.9	11.9	-----	10.8	10.5	10.6	16.5	14.7	14.7	-----	10.9	10.7	10.7	
-----	18.6	20.3	20.3	19.2	20.4	20.5	-----	15.3	16.6	17.4	15.2	16.9	16.9	-----	14.4	16.6	17.3	
-----	21.4	22.1	21.7	21.7	22.0	22.0	-----	16.4	16.5	17.4	16.3	17.1	17.1	-----	17.5	19.8	18.5	
-----	12.4	13.8	13.8	13.8	14.8	14.8	-----	13.8	14.3	14.5	13.1	14.1	14.4	-----	10.8	11.9	11.8	
5.3	10.4	7.6	7.4	9.8	7.3	7.1	5.3	10.1	7.3	7.3	12.3	9.2	9.3	5.0	10.0	7.3	7.2	
58.6	70.1	74.9	74.6	58.6	57.9	58.0	45.0	64.6	65.9	68.2	83.3	81.9	82.5	50.0	71.6	71.8	71.8	
33.0	47.3	57.1	57.1	39.6	49.3	48.8	29.3	37.8	50.3	49.9	48.3	55.9	56.4	26.0	34.9	45.7	46.2	
-----	17.6	16.9	16.3	18.2	18.3	18.2	-----	16.4	17.3	16.9	18.9	16.1	16.4	-----	17.8	16.2	16.8	
-----	14.9	13.8	13.7	14.9	14.2	14.0	-----	14.2	13.6	13.9	18.9	15.6	15.8	-----	15.2	14.4	14.4	
-----	50.5	50.0	49.5	36.7	37.5	38.6	-----	49.0	44.6	46.3	16.6	15.9	16.1	-----	41.9	37.9	38.6	
-----	41.1	50.0	54.0	38.4	44.9	49.9	-----	48.8	53.9	56.0	38.2	46.7	44.3	-----	30.5	32.9	42.3	

¹ Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Chicago, Ill.				Cincinnati, Ohio				Cleveland, Ohio			
		Mar. 15—		Feb. 15,	Mar. 15,	Mar. 15—		Feb. 15,	Mar. 15,	Mar. 15—		Feb. 15,	Mar. 15,
				1925	1925			1925	1925			1925	1925
		1913	1924			1913	1924			1913	1924		
Sirloin steak	Pound	Cts. 22.0	Cts. 40.0	Cts. 40.6	Cts. 41.6	Cts. 22.4	Cts. 34.0	Cts. 34.9	Cts. 36.2	Cts. 23.7	Cts. 35.7	Cts. 36.5	Cts. 37.8
Round steak	do	18.9	31.3	30.3	31.7	19.9	30.0	31.2	32.8	21.0	29.6	29.6	31.1
Rib roast	do	19.4	31.3	31.5	32.3	19.0	27.8	27.9	28.8	19.2	25.4	26.2	26.7
Chuck roast	do	15.3	20.6	20.7	21.6	14.9	18.0	18.5	19.4	16.2	20.1	20.2	21.3
Plate beef	do	11.2	12.4	12.4	12.7	12.1	14.3	14.4	15.0	11.8	11.6	11.6	12.2
Pork chops	do	17.9	26.0	27.5	35.0	20.6	26.3	27.4	35.9	19.8	28.4	31.2	40.2
Bacon, sliced	do	29.8	41.4	42.8	47.7	25.0	28.8	35.5	39.2	25.6	36.5	41.5	46.3
Ham, sliced	do	31.3	46.1	48.7	51.7	26.8	45.1	49.0	51.3	33.5	48.0	49.8	54.9
Lamb, leg of	do	19.7	36.6	37.2	37.7	17.4	33.3	37.1	37.8	20.3	35.2	37.1	37.8
Hens	do	19.9	34.6	36.3	37.3	23.3	37.5	37.8	40.5	22.7	37.5	38.6	40.8
Salmon, canned, red	do		32.5	32.9	33.1		27.6	29.0	29.0		29.3	30.5	30.7
Milk, fresh	Quart	8.0	14.0	14.0	14.0	8.0	14.0	12.0	12.0	8.8	14.0	14.0	14.0
Milk, evaporated	15-16 oz. can		11.5	10.7	10.7		11.4	10.6	10.6		11.4	10.6	10.6
Butter	Pound	40.4	55.8	47.0	55.9	42.9	57.5	49.6	56.5	43.4	58.3	50.9	59.8
Oleomargarine	do		26.9	27.9	27.6		31.5	31.4	31.0		31.8	31.9	31.8
Nut margarine	do		25.8	26.5	26.6		29.1	28.8	29.3		30.6	30.5	30.7
Cheese	do		25.0	40.1	40.3	21.6	35.6	36.7	37.1	23.0	36.8	34.9	35.7
Lard	do		14.6	17.7	22.6	14.0	15.4	20.9	22.0	16.1	18.7	24.0	24.5
Vegetable lard substitute	do		25.1	26.1	26.1		24.7	25.6	26.1		26.6	27.1	27.3
Eggs, strictly fresh	Dozen	23.4	35.9	53.6	41.9	20.5	29.8	50.5	34.2	27.2	34.5	53.6	39.2
Bread	Pound	6.1	9.7	10.1	10.1	4.8	8.4	9.3	9.3	5.5	7.9	8.1	8.3
Flour	do	2.7	4.1	5.9	5.8	3.4	4.5	6.2	6.2	3.2	4.5	6.2	6.2
Corn meal	do	2.9	5.4	6.5	6.5	2.5	3.6	4.5	4.6	2.7	4.2	5.3	5.4
Rollod oats	do		8.5	8.6	8.8		8.3	8.9	8.9		8.9	8.8	9.1
Corn flakes	8-oz. pkg		9.4	10.2	10.2		9.1	10.2	10.3		10.0	11.2	11.3
Wheat cereal	28-oz. pkg		23.4	24.4	24.3		23.1	23.6	23.8		24.1	24.9	25.1
Macaroni	Pound		18.1	20.1	19.9		16.7	19.3	19.5		20.0	21.1	21.4
Rice	do	9.0	10.3	11.4	11.5	8.8	10.0	10.6	10.5	8.5	9.5	10.7	10.7
Beans, navy	do		10.0	10.2	10.1		8.0	8.8	9.0		9.1	9.7	9.8
Potatoes	do	1.3	2.6	2.4	2.3	1.4	2.5	2.3	2.4	1.4	2.5	2.3	2.3
Onions	do		5.9	5.9	5.9		5.0	5.2	5.1		5.7	5.3	5.3
Cabbage	do		6.6	5.2	5.4		6.6	4.5	5.1		7.6	5.0	5.5
Beans, baked	No. 2 can		12.6	12.7	12.7		11.9	11.3	11.4		12.6	12.4	12.5
Corn, canned	do		15.2	18.1	18.4		14.1	15.8	15.9		16.4	17.8	18.0
Peas, canned	do		17.3	17.8	18.0		17.6	17.1	17.0		17.6	17.1	17.1
Tomatoes, canned	do		14.1	15.0	15.0		12.8	13.7	13.8		13.8	14.4	14.4
Sugar, granulated	Pound	4.9	10.0	7.4	7.3	5.1	10.1	7.6	7.6	5.5	10.5	7.9	7.7
Tea	do	53.3	72.9	73.4	73.2	60.0	74.5	75.0	75.0	50.0	67.1	68.5	69.5
Coffee	do	30.0	41.1	53.1	53.2	25.6	36.0	46.3	47.0	26.5	44.0	53.4	54.4
Prunes	do		18.7	18.6	18.4		18.4	17.6	17.7		17.6	18.2	18.6
Raisins	do		16.5	15.8	15.7		15.8	14.3	14.4		15.5	14.7	14.7
Bananas	Dozen		46.1	41.0	41.8		45.0	38.6	39.2		50.7	50.8	52.2
Oranges	do		37.8	49.0	51.4		31.8	40.0	46.7		41.5	49.5	51.0

¹ The steak for which prices are here quoted is called "rump" in this city, but in most of the cities included in this report it would be known as "porterhouse" steak.

PRICES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Columbus, Ohio			Dallas, Tex.				Denver, Colo.				Detroit, Mich.				Fall River, Mass.			
Mar. 15, 1924	Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925
			1913	1924	1925	1925	1913	1924	1925	1925	1913	1924	1925	1925	1913	1924	1925	1925
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
37.3	36.8	37.6	21.8	34.1	33.7	34.8	22.7	28.9	29.0	30.0	24.0	37.1	37.4	39.5	32.0	56.4	58.3	59.1
31.7	31.3	32.3	20.3	29.8	30.4	30.6	19.6	24.5	24.8	25.8	19.4	29.7	30.3	31.3	25.0	42.1	42.9	43.3
28.6	29.1	28.9	18.8	27.0	27.8	28.1	16.6	21.5	21.1	21.8	19.8	26.8	27.4	29.2	22.0	28.0	27.9	28.3
22.2	21.8	22.2	15.6	20.7	21.4	21.6	14.6	17.3	16.4	17.0	15.4	19.8	19.8	20.8	17.0	21.2	21.7	21.4
14.9	14.8	15.0	12.5	15.2	15.9	15.9	9.4	9.6	9.4	9.8	11.0	12.1	12.2	12.9	-----	13.5	13.0	13.3
24.7	29.2	35.8	21.2	27.3	32.3	37.6	17.6	24.0	27.3	35.4	18.6	27.5	29.7	39.6	19.5	24.4	31.1	35.5
37.2	42.4	44.1	37.0	38.5	40.2	42.9	27.0	40.3	42.8	46.1	23.0	35.7	40.6	45.0	25.0	35.1	38.5	41.1
45.3	47.2	50.7	31.3	40.2	51.5	55.7	28.3	45.9	49.6	52.7	25.5	48.5	51.5	55.2	29.7	45.9	46.9	48.6
42.5	40.6	39.6	22.0	42.2	41.3	43.4	16.9	34.7	34.9	35.1	17.2	37.8	39.3	40.8	19.3	40.0	40.7	42.4
34.6	36.7	37.5	19.6	29.4	30.8	30.6	20.7	29.8	28.8	29.9	21.6	37.5	39.5	40.6	24.5	39.8	41.3	41.1
32.0	32.1	32.5	-----	30.2	32.8	33.2	-----	32.8	33.1	33.4	-----	29.7	30.6	31.1	-----	31.3	31.3	31.3
13.0	11.0	11.0	10.0	15.0	15.0	15.0	8.4	11.7	12.0	10.5	8.0	14.0	14.0	14.0	9.0	13.0	14.0	13.0
11.8	10.7	10.7	-----	14.1	13.4	13.4	-----	12.1	10.5	10.7	-----	11.6	10.7	10.7	-----	13.5	12.4	12.6
55.6	47.8	54.5	39.0	57.8	52.3	57.2	39.0	54.6	46.3	44.5	40.6	58.0	50.4	58.6	39.9	59.0	49.3	51.3
30.2	30.4	30.2	-----	34.0	35.0	38.0	-----	31.0	31.2	31.2	-----	30.4	30.3	30.4	-----	31.3	33.7	33.7
28.6	28.8	28.8	-----	32.6	33.1	33.8	-----	29.0	29.5	29.5	-----	27.8	27.4	27.6	-----	30.7	30.7	30.7
36.2	37.4	36.5	20.0	36.1	35.9	37.8	26.1	37.8	38.2	39.1	21.3	37.4	36.7	36.5	24.0	38.6	37.9	38.4
15.6	21.1	21.7	17.0	21.7	24.7	25.2	16.3	17.8	23.8	24.2	16.2	17.8	23.1	23.6	15.0	17.1	21.8	22.3
25.0	25.9	25.8	-----	21.4	23.6	24.8	-----	25.6	25.6	25.9	-----	25.6	26.5	26.8	-----	25.4	26.4	27.3
30.3	49.0	32.1	24.0	27.3	40.7	32.1	26.1	30.8	42.0	35.0	25.2	33.1	55.8	39.5	32.9	50.7	74.1	54.0
7.7	8.1	8.1	5.6	8.7	8.8	8.6	5.3	7.7	8.3	8.4	5.6	8.8	8.8	8.8	6.2	8.8	8.8	8.8
4.2	6.4	6.4	3.3	4.5	6.3	6.3	2.6	3.6	5.5	5.5	3.1	4.2	6.1	6.3	3.2	4.9	6.5	6.6
3.7	4.5	4.6	2.6	4.5	5.4	5.4	2.4	3.2	4.5	4.4	2.7	4.7	5.5	5.9	3.4	7.1	7.7	7.5
9.4	9.5	9.5	-----	10.7	10.7	10.7	-----	8.9	9.0	9.0	-----	8.9	9.2	9.8	-----	9.6	9.6	9.8
9.7	10.6	10.6	-----	9.8	11.2	11.1	-----	9.8	11.9	11.8	-----	9.1	10.4	10.5	-----	10.0	11.2	11.4
24.6	23.9	23.9	-----	25.3	26.7	26.7	-----	24.5	24.6	24.6	-----	23.9	24.3	25.0	-----	25.3	26.1	26.2
18.2	20.9	21.4	-----	21.5	21.4	21.6	-----	19.9	19.4	19.0	-----	19.0	20.7	21.2	-----	23.6	23.9	24.3
10.3	10.9	10.9	9.3	11.4	13.1	13.0	8.6	9.9	10.3	10.5	8.4	9.9	10.7	11.1	10.0	10.2	10.8	10.8
8.3	9.5	9.5	-----	11.4	12.2	12.5	-----	11.2	10.9	11.0	-----	8.4	9.2	9.3	-----	10.2	10.4	10.6
2.5	2.2	2.2	1.8	4.4	4.6	4.5	1.0	2.4	2.3	2.4	1.2	1.9	1.7	1.7	1.7	2.9	2.2	1.9
6.4	6.4	6.4	-----	7.4	7.7	8.4	-----	4.8	5.4	5.4	-----	4.9	5.5	5.7	-----	6.6	6.4	6.1
7.1	4.6	4.7	-----	5.6	6.0	5.6	-----	4.6	5.5	4.8	-----	7.2	3.5	4.9	-----	8.2	6.0	6.3
13.7	13.3	13.2	-----	14.9	14.3	14.7	-----	14.0	14.2	14.2	-----	12.1	12.1	12.2	-----	12.7	12.6	12.6
13.4	17.3	17.4	-----	17.2	19.2	20.1	-----	15.1	17.9	18.3	-----	15.7	17.7	17.9	-----	16.2	17.4	17.4
16.7	17.2	17.0	-----	21.7	22.0	20.9	-----	16.9	16.9	17.0	-----	17.3	17.9	17.8	-----	18.4	19.1	19.1
13.6	14.4	14.4	-----	14.4	14.7	14.8	-----	14.0	14.6	15.0	-----	13.0	13.7	14.1	-----	13.8	13.8	13.8
10.4	7.9	8.0	5.7	11.4	8.3	8.3	5.4	11.1	8.5	8.4	5.0	10.1	7.6	7.5	5.2	10.5	7.7	7.6
79.4	84.0	83.4	66.7	97.6	102.6	99.3	52.8	68.5	69.2	67.4	43.3	64.3	61.7	69.6	44.2	58.9	59.7	58.3
40.2	52.9	52.8	36.7	46.5	61.2	61.4	29.4	39.9	52.0	52.3	29.3	39.8	52.2	52.7	33.0	41.7	53.7	54.4
19.3	18.6	18.8	-----	19.5	20.6	21.0	-----	18.8	18.8	18.1	-----	17.7	19.1	19.2	-----	16.6	15.0	14.8
15.8	14.7	14.7	-----	16.9	16.1	16.9	-----	15.3	14.4	14.5	-----	15.9	14.9	15.1	-----	16.5	14.5	14.7
39.1	39.4	39.4	-----	36.4	33.0	32.0	-----	14.7	13.8	14.0	-----	36.8	35.6	36.9	-----	11.4	10.3	10.7
37.2	45.7	49.7	-----	46.4	47.6	54.6	-----	35.7	44.8	46.1	-----	44.5	51.0	52.0	-----	38.4	41.3	48.2

* Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Houston, Tex.			Indianapolis, Ind.				Jacksonville, Fla.			
		Mar.	Feb.	Mar.	Mar. 15—		Feb.	Mar.	Mar. 15—		Feb.	Mar.
		15, 1924	15, 1925	15, 1925	1913	1924	15, 1925	15, 1925	1913	1924	15, 1925	15, 1925
Sirloin steak	Pound	Cts. 28.9	Cts. 29.8	Cts. 30.0	Cts. 24.8	Cts. 35.4	Cts. 35.3	Cts. 36.3	Cts. 25.8	Cts. 37.0	Cts. 34.5	Cts. 35.0
Round steak	do	28.0	29.1	29.3	23.2	34.2	32.8	34.8	20.3	30.8	28.8	29.7
Rib roast	do	23.3	23.2	23.6	17.2	26.2	26.6	27.6	25.0	28.5	26.3	25.7
Chuck roast	do	18.2	18.0	19.2	15.5	21.9	22.4	23.1	15.8	18.2	18.4	19.0
Plate beef	do	15.5	15.9	16.2	12.3	13.7	13.9	14.2	10.3	10.6	11.5	11.5
Pork chops	do	25.9	27.9	33.8	20.0	25.3	28.5	36.7	23.0	28.0	30.4	33.9
Bacon, sliced	do	41.8	41.6	44.1	28.0	32.9	38.3	42.1	26.0	32.5	35.5	39.1
Ham, sliced	do	45.4	47.7	49.7	29.5	47.5	49.3	52.8	26.8	44.0	46.1	50.7
Lamb, leg of	do	32.5	33.3	34.2	18.7	39.3	42.5	44.3	20.8	35.5	41.0	36.3
Hens	do	31.7	34.0	37.6	21.8	33.3	34.0	35.4	22.0	35.6	36.7	36.4
Salmon, canned, red	do	29.2	31.1	30.7	---	36.2	31.9	32.6	---	30.7	30.8	30.8
Milk, fresh	Quart	15.8	16.3	16.3	8.0	12.0	11.0	11.0	12.5	19.0	19.3	18.8
Milk, evaporated	15-16 oz. can	13.0	11.9	11.9	---	11.6	10.5	10.4	---	12.9	11.8	11.8
Butter	Pound	56.1	51.8	55.3	42.3	54.1	48.7	57.2	43.8	60.7	53.5	58.0
Oleomargarine	do	33.3	32.8	32.7	---	30.6	31.4	30.7	---	30.0	30.3	30.4
Nut margarine	do	30.2	31.2	31.2	---	29.6	29.8	28.5	---	29.0	30.7	30.5
Cheese	do	33.3	34.2	34.4	20.5	35.8	36.9	37.4	22.5	34.5	34.4	34.2
Lard	do	19.9	23.3	22.9	15.2	14.3	21.1	21.9	15.3	18.1	22.6	23.0
Vegetable lard substitute	do	17.8	18.7	19.0	---	25.4	26.5	26.5	---	23.3	24.7	24.2
Eggs, strictly fresh	Dozen	28.3	36.5	30.1	20.0	29.2	43.9	30.9	30.0	31.0	54.1	35.2
Bread	Pound	7.0	8.9	8.9	5.1	8.5	8.5	8.1	6.5	9.9	11.1	11.1
Flour	do	4.8	6.4	6.6	3.3	4.3	6.1	6.1	3.8	5.4	6.9	6.8
Corn meal	do	4.2	5.3	5.2	2.6	3.6	4.8	4.8	2.6	3.8	4.4	4.3
Rolled oats	do	9.0	9.3	9.5	---	7.3	7.9	7.9	---	9.1	9.7	9.6
Corn flakes	8-oz. pkg	9.7	11.6	11.9	---	8.8	10.1	10.1	---	9.7	11.6	11.6
Wheat cereal	28-oz. pkg	24.1	25.1	24.8	---	24.2	24.6	24.3	---	24.8	24.9	24.9
Macaroni	Pound	19.1	18.9	19.3	---	18.5	20.1	20.3	---	19.8	20.8	20.8
Rice	do	8.1	9.6	9.6	9.2	10.8	10.7	10.9	6.6	9.0	9.9	10.0
Beans, navy	do	10.3	10.9	11.0	---	8.8	9.5	9.6	---	11.0	10.7	10.8
Potatoes	do	4.1	4.3	4.4	1.3	2.1	2.0	1.9	2.3	3.9	3.1	2.9
Onions	do	5.7	7.0	7.4	---	5.4	6.0	5.8	---	6.8	7.5	7.8
Cabbage	do	4.1	5.5	5.1	---	6.3	4.3	4.4	---	5.3	4.4	4.5
Beans, baked	No. 2 can	12.8	12.8	12.8	---	13.1	12.5	12.0	---	12.0	11.8	11.8
Corn, canned	do	15.2	18.6	18.9	---	13.6	17.1	17.3	---	17.6	20.9	20.9
Peas, canned	do	18.1	17.8	17.8	---	16.2	16.9	16.6	---	18.0	20.2	20.2
Tomatoes, canned	do	12.1	13.6	13.8	---	14.2	14.7	14.7	---	11.0	12.4	12.6
Sugar, granulated	Pound	10.0	7.5	7.5	5.8	10.6	7.9	7.9	5.9	10.8	8.1	7.9
Tea	do	74.5	78.9	78.5	60.0	79.5	81.1	81.1	60.0	89.0	96.4	97.7
Coffee	do	36.3	47.9	46.9	31.3	42.6	52.4	52.6	34.5	42.0	51.5	52.1
Prunes	do	18.1	17.3	17.3	---	20.0	20.5	20.0	---	18.3	17.9	18.1
Raisins	do	16.0	15.3	15.4	---	17.4	15.8	15.8	---	17.8	15.5	15.6
Bananas	Dozen	31.8	29.5	30.0	---	35.7	31.2	31.5	---	34.3	26.9	27.8
Oranges	do	38.8	40.9	43.1	---	36.7	39.2	44.5	---	25.0	24.8	33.3

¹ The steak for which prices are here quoted is called "sirloin" in this city. But in most of the cities included in this report it would be known as "porterhouse" steak.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Kansas City, Mo.				Little Rock, Ark.				Los Angeles, Calif.				Louisville, Ky.				Manchester, N. H.			
Mar. 15—		Feb. 15, 1925		Mar. 15, 1925		Feb. 15, 1925		Mar. 15, 1925		Feb. 15, 1925		Mar. 15, 1925		Feb. 15, 1925		Mar. 15, 1925		Feb. 15, 1925	
1913	1924			1913	1924			1913	1924			1913	1924			1913	1924		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
22.8	37.1	36.5	37.5	24.4	32.9	32.2	32.8	22.8	34.8	35.9	36.7	21.8	31.5	32.3	33.0	35.2	54.9	55.1	55.9
20.2	30.8	30.1	31.2	19.4	28.0	28.8	28.8	20.4	28.9	28.3	30.0	18.9	27.8	28.2	29.0	28.6	43.3	43.8	43.7
17.7	25.5	25.6	25.7	18.4	25.2	24.0	25.0	19.0	27.9	28.3	28.6	17.9	23.7	23.8	24.1	19.6	27.8	28.0	27.6
14.7	19.0	18.1	18.5	15.3	18.1	18.0	19.9	16.0	19.4	18.7	19.2	15.3	18.0	17.8	18.1	16.8	21.6	20.9	21.3
11.4	11.6	11.4	11.7	12.0	15.2	15.2	15.2	12.7	14.5	13.7	14.1	11.9	13.8	14.2	14.3	-----	15.4	14.8	15.2
19.2	23.4	27.0	35.0	20.0	25.8	28.2	35.0	24.4	36.5	38.3	48.2	19.6	22.5	26.6	33.1	19.2	26.1	30.9	36.7
28.4	38.8	42.3	46.9	34.0	37.1	38.9	46.3	33.8	46.4	49.4	54.8	27.8	29.7	35.6	40.6	22.6	31.1	37.3	41.1
27.9	45.0	48.1	52.6	28.8	44.7	46.8	51.5	34.2	57.1	58.9	60.8	27.9	40.3	42.5	45.9	27.8	37.4	41.0	44.1
17.3	33.9	35.1	34.6	20.8	36.3	42.1	42.1	19.2	36.0	37.3	38.1	37.0	37.5	38.8	18.6	37.4	38.3	38.4	38.4
17.4	31.3	31.2	32.1	17.9	28.1	28.8	29.5	26.5	40.7	41.9	42.0	23.1	36.4	36.6	36.6	23.2	41.2	42.3	42.6
8.7	34.0	34.4	34.4	-----	30.3	31.9	31.9	-----	37.2	30.8	28.9	-----	29.4	29.7	29.4	-----	29.5	30.5	30.8
13.3	13.0	13.0	13.0	10.0	15.7	15.3	15.3	10.0	15.7	15.0	15.3	8.8	13.0	12.3	12.0	8.0	13.0	13.0	12.3
12.2	11.9	11.8	-----	-----	13.0	12.0	12.2	-----	10.3	9.9	10.0	-----	12.3	11.6	11.7	-----	13.7	12.7	12.7
40.6	57.1	50.6	58.0	43.3	56.9	51.9	57.2	43.5	57.8	54.8	55.2	43.6	58.7	51.8	59.1	42.2	62.3	52.5	55.9
27.6	28.0	27.7	-----	-----	31.4	28.5	30.0	-----	35.5	34.2	34.3	-----	31.7	32.0	31.5	-----	28.8	31.0	31.0
27.6	28.1	28.1	-----	-----	29.1	30.5	30.5	-----	29.4	29.8	29.8	-----	28.3	28.4	29.3	-----	22.7	26.3	25.0
21.5	36.7	37.5	37.1	21.7	35.6	37.8	37.8	19.5	39.6	38.4	38.0	21.7	33.2	36.6	37.3	21.5	37.6	36.6	37.1
16.2	17.1	22.8	23.6	15.0	18.7	23.1	23.9	17.9	19.5	23.4	23.9	15.3	15.0	21.1	22.5	16.2	17.2	21.9	22.4
25.9	27.2	26.4	-----	-----	20.3	23.6	23.1	-----	24.5	25.7	25.6	-----	26.8	28.0	27.0	-----	23.3	26.1	26.5
23.1	28.8	46.2	35.8	20.5	27.9	42.6	31.6	26.0	33.3	39.1	39.8	20.4	28.5	43.8	32.6	29.6	43.6	65.9	47.1
5.9	8.2	9.6	9.6	6.0	8.1	8.7	8.7	6.2	8.7	9.4	9.4	5.7	8.4	9.4	9.4	5.9	8.3	9.2	8.4
3.0	4.3	6.4	6.3	3.6	5.1	6.6	6.7	3.6	4.5	6.4	6.3	3.7	5.0	7.0	6.9	3.4	4.8	6.7	6.6
2.5	4.6	5.9	5.9	2.4	3.5	4.5	4.5	3.1	4.3	5.9	5.8	2.2	3.1	4.5	4.3	3.6	4.8	5.7	5.5
9.0	9.3	9.8	-----	-----	9.4	10.4	10.2	-----	9.6	9.8	10.1	-----	8.3	8.7	8.7	-----	8.8	8.8	8.8
9.9	11.7	11.8	-----	-----	9.6	12.0	12.1	-----	9.7	10.2	10.2	-----	9.3	10.6	10.6	-----	9.8	11.2	11.4
24.9	25.3	25.3	-----	-----	24.9	24.8	24.8	-----	23.4	23.4	23.8	-----	23.7	23.4	24.7	-----	24.5	24.6	24.6
21.7	21.8	21.6	-----	-----	20.2	21.4	21.3	-----	15.3	17.7	17.8	-----	16.6	19.6	19.5	-----	24.5	24.4	24.4
8.7	9.3	10.6	10.5	8.3	8.1	10.0	10.3	7.7	10.2	10.7	11.0	8.1	8.6	10.8	10.6	8.5	9.3	10.3	10.5
9.9	10.4	10.3	-----	-----	10.7	10.4	10.9	-----	9.3	10.3	10.3	-----	7.6	9.6	9.6	-----	9.9	9.8	9.9
1.5	2.5	2.4	2.5	1.7	2.9	3.1	3.1	1.0	3.7	3.9	3.6	1.4	2.2	2.2	2.2	1.4	2.6	2.1	1.7
7.1	7.9	7.6	-----	-----	6.6	7.8	7.1	-----	5.4	8.8	8.3	-----	5.3	5.9	5.8	-----	6.1	5.6	5.7
5.9	4.5	4.7	-----	-----	6.2	5.8	4.3	-----	5.8	5.1	4.5	-----	7.1	4.9	5.2	-----	6.3	4.1	5.6
14.0	13.9	13.9	-----	-----	12.5	12.5	12.4	-----	12.8	12.2	12.0	-----	11.5	11.9	11.9	-----	14.4	14.2	14.4
14.4	16.9	16.8	-----	-----	15.2	20.1	20.4	-----	15.1	17.7	17.6	-----	13.9	17.7	18.3	-----	18.1	18.5	18.5
16.6	16.2	16.4	-----	-----	18.5	19.6	19.6	-----	17.3	19.1	18.8	-----	16.7	17.6	17.8	-----	21.4	20.8	21.1
13.6	14.4	14.4	-----	-----	13.1	14.0	14.0	-----	14.4	16.0	16.0	-----	12.2	12.8	13.2	-----	14.2	14.2	14.2
5.6	10.6	8.2	8.1	5.7	11.3	8.4	8.7	5.2	10.3	7.6	7.5	5.1	10.6	7.9	7.9	5.6	10.6	7.8	7.7
54.0	80.4	82.3	83.2	50.0	87.7	99.9	99.9	54.5	68.1	76.0	75.7	62.5	72.8	75.3	74.2	45.0	58.9	61.2	61.5
27.8	43.9	55.0	55.0	30.8	43.8	56.3	57.1	36.3	45.7	54.2	54.7	27.5	39.0	53.4	53.0	32.0	43.2	52.9	52.5
17.8	17.5	17.8	-----	-----	17.6	18.1	17.8	-----	17.9	16.5	16.1	-----	17.8	16.7	16.9	-----	16.6	16.6	16.1
16.8	16.0	16.1	-----	-----	18.5	16.6	16.4	-----	14.9	11.7	11.9	-----	14.9	14.5	14.9	-----	14.9	14.4	14.4
13.6	12.8	12.3	-----	-----	11.5	10.3	10.3	-----	12.2	11.1	11.5	-----	41.7	35.0	35.0	-----	11.5	10.3	11.3
43.7	52.1	50.1	-----	-----	40.2	43.9	45.6	-----	32.8	45.5	42.1	-----	31.5	38.1	41.4	-----	35.5	44.8	51.6

No. 2½ can.

¹ Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Memphis, Tenn.				Milwaukee, Wis.				Minneapolis, Minn.			
		Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925
		1913	1924			1913	1924			1913	1924		
Sirloin steak	Pound	Cts. 22.1	Cts. 32.8	Cts. 32.7	Cts. 33.1	Cts. 21.5	Cts. 36.9	Cts. 36.0	Cts. 36.5	Cts. 20.0	Cts. 29.5	Cts. 29.2	Cts. 29.7
Round steak	do.	18.4	27.9	29.1	29.9	20.0	32.0	31.6	31.6	18.5	25.8	25.1	26.1
Rib roast	do.	18.7	23.4	24.2	24.5	17.8	27.6	25.9	26.8	18.2	23.8	23.1	23.5
Chuck roast	do.	14.4	18.1	16.8	17.9	15.5	22.4	22.0	22.3	15.0	19.0	17.6	18.2
Plate beef	do.	11.4	13.8	13.7	14.1	11.3	12.9	13.1	13.1	9.7	10.5	9.9	10.1
Pork chops	do.	20.7	22.0	24.8	32.4	18.8	25.5	26.8	36.9	17.8	25.3	27.9	36.7
Bacon, sliced	do.	29.3	33.8	35.8	39.6	27.3	37.2	39.2	42.6	25.0	38.1	43.7	47.3
Ham, sliced	do.	26.4	42.1	46.1	49.1	26.8	42.5	44.5	47.1	27.5	42.5	47.0	51.7
Lamb, leg of	do.	20.4	34.4	37.5	36.7	20.0	37.2	37.9	38.5	15.7	30.1	35.6	35.7
Hens	do.	19.0	29.2	31.4	33.2	21.8	34.7	33.9	36.2	19.5	32.0	32.9	34.1
Salmon, canned, red	do.		35.1	36.6	36.7		34.1	33.0	29.7		36.9	31.4	31.8
Milk, fresh	Quart	10.0	14.7	15.3	15.3	7.0	11.0	10.0	10.0	7.0	12.0	11.0	11.0
Milk, evaporated	15-16 oz. can.		13.0	11.5	11.6		11.5	10.9	10.9		12.7	11.2	11.2
Butter	Pound	42.1	57.2	47.3	54.4	39.6	53.9	46.6	55.7	39.0	53.7	44.3	51.6
Oleomargarine	do.		29.5	37.5	37.5		28.2	28.9	28.0		28.8	29.1	29.4
Nut margarine	do.		24.6	27.5	28.3		27.7	27.8	27.5		26.7	27.3	27.3
Cheese	do.	21.3	33.2	33.4	33.9	22.0	35.3	34.3	34.7	20.3	35.4	33.9	34.9
Lard	do.	15.4	15.7	20.5	20.9	15.3	18.3	22.8	23.3	15.3	17.1	21.6	22.4
Vegetable lard substitute	do.		23.9	23.5	23.4		25.4	26.6	27.0		27.3	27.6	27.5
Eggs, strictly fresh	Dozen	21.9	30.6	43.6	36.5	23.2	28.4	48.8	34.9	22.4	28.4	46.5	33.8
Bread	Pound	6.0	9.0	9.4	9.5	5.6	9.2	9.2	9.2	5.6	8.9	10.0	10.1
Flour	do.	3.6	5.2	7.0	7.0	3.1	4.1	5.8	5.8	2.9	4.3	5.9	5.8
Corn meal	do.	2.0	3.6	4.4	4.4	3.3	4.4	5.8	5.7	2.4	4.4	5.7	5.7
Rollod oats	do.		9.4	9.7	9.7		7.7	8.8	8.8		8.6	8.6	8.7
Corn flakes	8-oz. pkg.		9.8	11.2	11.3		9.2	10.3	10.6		10.1	11.7	11.7
Wheat cereal	28-oz. pkg.		24.9	24.6	24.7		23.0	24.0	24.0		24.2	24.7	24.8
Macaroni	Pound		18.7	19.5	19.5		17.9	18.6	18.7		17.6	18.6	18.6
Rice	do.	7.5	8.8	9.7	9.7	9.0	10.5	11.1	11.0	9.1	10.0	10.7	11.1
Beans, navy	do.		9.7	9.6	9.9		9.5	9.6	9.6		9.5	9.4	9.6
Potatoes	do.	1.6	3.1	3.0	3.0	1.2	2.2	1.9	1.9	1.0	1.9	1.6	1.6
Onions	do.		5.7	6.1	5.9		6.1	5.7	5.7		6.2	6.3	6.6
Cabbage	do.		4.9	4.3	3.9		6.5	4.5	4.8		5.4	3.4	3.6
Beans, baked	No. 2 can		13.3	12.2	12.2		12.0	11.6	11.6		13.9	13.6	13.7
Corn, canned	do.		14.6	17.7	17.6		15.8	17.7	17.8		13.9	16.5	16.5
Peas, canned	do.		17.8	18.9	18.4		16.5	17.3	17.1		16.5	16.9	16.9
Tomatoes, canned	do.		12.8	12.6	12.7		14.0	15.2	15.0		14.7	14.8	14.9
Sugar, granulated	Pound	5.5	10.7	7.8	7.7	5.4	10.2	7.3	7.2	5.6	10.5	8.1	7.8
Tea	do.	63.8	83.8	92.8	95.1	50.0	71.4	71.4	71.6	45.0	85.3	62.5	62.3
Coffee	do.	27.5	42.1	52.8	52.1	27.5	37.7	49.0	50.1	30.8	44.7	54.7	54.7
Prunes	do.		18.3	16.3	16.4		18.7	17.6	17.4		18.7	17.0	17.3
Raisins	do.		16.9	14.9	14.7		15.2	14.5	14.6		16.1	14.7	14.8
Bananas	Dozen		36.7	34.0	33.0		13.0 ¹	10.5 ¹	10.2		14.2 ¹	12.6 ¹	12.8
Oranges	do.		36.9	42.9	48.3		38.3	49.4	50.1		40.2	45.7	50.1

¹ Whole.² No. 3 can.³ Per

PRICES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Mobile, Ala.			Newark, N. J.				New Haven, Conn.				New Orleans, La.				New York, N. Y.			
Mar. 15, 1924	Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925
			1913	1924			1913	1924			1913	1924			1913	1924		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
31.5	31.5	31.9	26.2	44.1	42.8	45.9	30.4	50.4	51.3	50.5	20.0	33.9	32.8	33.3	25.4	41.1	43.0	43.8
30.3	30.0	30.4	25.0	42.1	40.8	42.9	26.6	41.7	42.0	42.0	17.5	29.5	29.5	29.5	23.8	40.0	40.9	41.3
25.0	25.0	26.5	20.0	34.6	34.6	35.4	23.0	34.4	34.2	34.4	19.6	30.0	28.4	28.7	21.7	35.8	37.3	37.6
20.2	20.0	20.0	16.8	23.6	22.6	24.4	18.0	24.4	25.6	25.4	13.0	21.6	19.6	20.6	15.8	22.8	23.3	23.7
15.5	15.5	15.7	12.0	12.8	12.6	13.1	-----	13.8	14.0	14.2	11.1	16.8	16.7	16.3	14.5	18.3	18.6	18.4
28.8	34.6	38.1	21.2	25.8	29.8	37.1	21.2	26.6	29.1	36.3	21.1	27.9	29.0	35.5	21.3	28.9	33.2	39.2
38.2	39.3	42.7	23.4	37.5	38.3	43.5	26.7	37.4	41.9	45.6	29.3	36.3	39.4	42.5	23.6	34.7	40.4	43.5
41.0	44.2	45.7	19.8	26.2	48.2	52.1	30.6	49.9	54.1	55.9	26.0	40.6	48.7	51.0	28.5	47.8	53.5	55.6
37.0	37.5	40.6	21.2	38.3	39.4	39.5	19.0	38.0	38.1	39.6	20.5	41.1	39.1	37.9	17.3	36.3	35.8	36.9
35.6	34.4	35.0	23.2	37.6	38.9	38.1	23.0	39.7	39.9	39.8	23.2	37.5	37.1	37.3	21.1	37.0	37.6	37.9
28.5	29.5	20.6	-----	27.9	26.3	26.5	-----	32.9	30.5	30.1	-----	41.5	37.5	37.4	-----	28.6	29.3	29.4
20.0	20.0	20.0	9.0	15.5	16.0	15.0	9.0	15.0	16.0	16.0	10.0	15.0	14.3	14.3	9.0	14.0	15.0	15.0
12.8	11.6	11.5	-----	11.9	10.6	10.6	-----	12.3	11.9	11.8	-----	11.7	10.9	10.9	-----	11.7	10.7	10.7
61.0	52.9	56.0	43.8	59.2	50.7	58.1	39.0	58.7	49.9	52.7	41.9	59.4	50.5	53.9	41.2	56.1	49.9	57.1
33.4	33.0	33.2	-----	31.4	32.3	31.1	-----	33.8	33.7	33.3	-----	31.0	32.6	31.9	-----	30.8	31.4	31.5
28.2	29.2	29.2	-----	28.9	29.1	29.0	-----	30.0	30.5	30.5	-----	28.6	29.8	29.4	-----	28.4	28.6	28.6
35.6	36.0	36.0	24.5	41.2	37.9	38.6	22.0	37.2	37.7	37.4	21.4	35.0	36.1	35.5	19.8	37.8	37.0	37.0
17.1	23.2	23.2	15.7	18.3	21.9	23.1	15.8	17.7	22.3	22.8	14.6	16.5	21.4	21.5	16.0	18.3	22.9	23.1
19.5	21.8	21.7	-----	24.9	25.0	25.1	-----	24.3	25.2	25.2	-----	21.2	23.9	22.9	-----	25.7	26.0	26.0
27.5	46.7	32.0	35.0	44.9	67.2	49.7	32.0	48.0	71.5	50.5	23.4	30.2	46.4	35.9	31.8	42.6	65.9	49.2
8.8	9.8	9.5	5.6	8.6	9.1	9.1	6.0	8.3	8.3	8.3	5.1	7.7	8.9	8.9	6.0	9.5	9.6	9.6
5.1	7.1	7.2	3.6	4.6	6.4	6.4	3.1	4.6	6.5	6.5	3.8	5.4	7.4	7.6	3.2	4.7	6.7	6.6
3.7	4.7	4.7	3.6	6.4	6.7	6.7	3.2	6.2	6.6	6.4	2.6	3.7	4.6	4.6	3.4	5.6	6.8	6.7
8.5	8.7	8.7	-----	8.1	8.4	8.4	-----	9.0	9.5	9.5	-----	8.6	9.2	9.3	-----	8.5	8.9	9.0
9.3	11.1	11.1	-----	8.9	9.7	9.7	-----	9.6	10.9	10.9	-----	9.3	10.6	10.9	-----	8.8	10.1	10.1
23.5	24.2	24.2	-----	23.6	23.5	23.5	-----	24.0	24.3	24.2	-----	23.9	24.3	24.0	-----	22.5	23.0	23.1
19.4	19.9	19.8	-----	20.9	20.8	21.1	-----	22.5	22.7	22.8	-----	9.6	10.1	10.0	-----	20.4	21.1	20.9
8.6	10.0	10.1	9.0	9.8	10.4	10.3	9.3	10.4	11.4	11.7	7.4	9.2	9.8	10.0	8.0	9.5	10.3	10.5
10.2	10.4	10.4	-----	9.9	10.5	10.6	-----	9.8	10.1	10.1	-----	9.3	9.7	9.8	-----	11.2	11.0	11.1
3.1	3.1	3.1	2.4	3.5	2.7	2.6	1.6	3.0	2.4	2.2	1.9	3.3	3.4	3.3	2.3	3.6	3.0	2.9
5.4	6.1	6.1	-----	6.3	6.4	6.2	-----	6.0	5.9	5.9	-----	5.1	5.4	5.5	-----	6.0	5.9	6.1
5.5	4.8	4.4	-----	8.2	5.0	5.9	-----	7.4	5.0	5.9	-----	4.6	4.0	3.8	-----	6.4	4.1	6.4
12.5	11.5	11.6	-----	11.3	11.4	11.4	-----	11.9	12.0	11.9	-----	12.4	12.3	12.1	-----	11.9	11.5	11.5
15.3	17.3	17.6	-----	15.1	17.7	17.7	-----	18.0	18.8	18.9	-----	13.7	17.5	18.0	-----	15.6	16.8	17.0
16.1	17.4	17.4	-----	17.7	18.8	18.6	-----	20.1	20.8	21.0	-----	16.9	17.8	17.6	-----	17.8	17.3	17.3
11.5	12.7	12.6	-----	12.0	12.1	12.1	-----	21.8	22.9	22.9	-----	11.6	13.2	13.5	-----	11.1	13.1	13.3
10.4	7.9	7.9	5.2	10.1	7.2	7.0	5.1	10.2	7.8	7.5	5.2	9.6	6.9	7.0	4.8	9.6	7.0	6.9
74.0	79.2	80.8	53.8	58.3	61.4	61.1	55.0	57.7	59.4	59.2	62.1	70.9	82.6	82.2	43.3	59.4	62.6	64.4
40.5	51.5	52.4	29.3	38.9	50.0	50.3	33.8	42.7	54.4	54.4	26.3	35.4	43.4	43.5	27.5	38.7	48.6	48.5
16.7	16.0	16.2	-----	16.3	15.7	16.1	-----	16.6	17.2	17.3	-----	18.2	18.2	18.1	-----	15.8	16.2	16.1
16.4	15.4	15.3	-----	15.3	13.6	13.9	-----	15.4	14.4	14.4	-----	15.4	14.5	14.4	-----	15.7	14.6	14.4
29.4	20.7	23.6	-----	38.0	37.5	37.5	-----	33.8	35.0	35.4	-----	22.0	20.0	19.2	-----	42.2	42.6	41.7
31.5	34.2	38.2	-----	37.7	42.2	51.9	-----	38.2	49.7	52.5	-----	38.2	41.8	44.5	-----	43.9	49.9	54.3

¹ Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Norfolk, Va.			Omaha, Nebr.				Peoria, Ill.		
		Mar. 15, 1924	Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	Mar. 15, 1924	Feb. 15, 1925	Mar. 15, 1925
					1913	1924					
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	40.9	38.0	40.1	24.5	35.6	35.3	36.3	32.1	31.6	33.8
Round steak	do	34.2	32.0	33.0	20.8	31.4	31.1	32.4	29.8	29.1	32.3
Rib roast	do	33.5	30.1	31.2	17.9	25.5	24.3	25.2	23.1	23.2	24.2
Chuck roast	do	21.3	20.7	21.6	15.5	20.1	19.9	20.4	19.9	19.6	21.7
Plate beef	do	14.7	14.3	15.3	10.3	10.5	10.9	10.9	12.8	12.3	13.8
Pork chops	do	25.5	29.1	33.5	18.2	25.2	28.0	37.1	25.1	27.1	36.6
Bacon, sliced	do	31.6	36.9	39.9	27.0	42.2	43.3	47.7	39.0	43.3	48.2
Ham, sliced	do	37.0	40.2	41.8	29.0	45.9	50.5	53.3	44.3	47.7	51.9
Lamb, leg of	do	39.4	38.3	41.8	18.0	36.7	39.0	39.2	34.6	38.2	39.4
Hens	do	35.3	35.8	38.2	18.5	31.1	30.9	31.3	31.8	31.5	34.8
Salmon, canned, red	do	28.7	30.6	31.2		32.9	33.3	33.8	32.1	32.2	32.5
Milk, fresh	Quart	17.0	17.0	17.0	8.1	12.2	11.4	11.6	12.2	12.0	12.0
Milk, evaporated	15-16 oz. can	11.6	10.9	10.7		12.1	11.4	11.4	12.0	11.6	11.7
Butter	Pound	61.3	51.8	54.0	39.6	54.0	46.6	52.5	53.6	46.5	55.0
Oleomargarine	do	31.7	31.5	31.5		29.2	30.6	31.2	31.1	31.6	30.9
Nut margarine	do	27.0	27.7	27.9		28.6	29.6	29.4	29.3	29.7	29.6
Cheese	do	32.7	33.1	32.9	22.9	35.2	35.9	36.2	36.7	35.8	36.4
Lard	do	15.9	21.8	22.4	17.3	19.2	24.3	25.0	18.2	23.3	23.5
Vegetable lard substitute	do	19.4	22.6	22.0		26.2	28.2	28.0	26.3	27.4	27.8
Eggs, strictly fresh	Dozen	35.8	53.9	36.2	20.5	28.3	41.2	30.8	29.5	46.8	33.0
Bread	Pound	7.9	9.4	9.4	5.2	9.6	9.8	9.8	8.6	10.0	10.0
Flour	do	4.4	6.5	6.5	2.9	3.9	5.8	5.8	4.6	6.4	6.3
Corn meal	do	4.0	4.8	4.8	2.3	4.0	5.3	5.2	4.0	5.1	5.2
Rolled oats	do	8.0	9.0	9.0		10.6	10.8	10.7	9.0	9.4	9.6
Corn flakes	8-oz. pkg.	9.0	10.8	10.8		9.7	11.9	11.9	9.9	12.0	12.3
Wheat cereal	28-oz. pkg.	23.3	24.1	24.3		24.4	24.6	24.6	25.2	25.5	26.2
Macaroni	Pound	19.6	19.3	19.1		20.2	21.2	21.2	19.2	21.4	21.0
Rice	do	10.0	11.7	11.8	8.5	9.3	10.1	10.2	9.8	10.7	11.0
Beans, navy	do	9.5	9.9	9.9		10.1	10.3	10.3	9.1	10.1	10.3
Potatoes	do	3.0	2.6	2.5	1.3	2.5	2.2	2.2	2.3	2.1	2.2
Onions	do	6.4	6.1	6.0		6.2	6.8	7.2	7.0	7.3	8.0
Cabbage	do	6.4	4.5	5.0		5.9	4.5	4.7	6.0	5.5	5.9
Beans, baked	No. 2 can	10.1	10.1	10.1		14.6	14.7	14.7	12.9	12.1	12.1
Corn, canned	do	16.1	17.3	17.4		16.6	16.8	16.4	13.8	16.3	16.3
Peas, canned	do	19.0	22.1	22.1		16.5	16.6	16.4	17.6	19.2	19.2
Tomatoes, canned	do	11.3	12.1	12.3		14.1	14.8	15.1	14.1	15.6	15.8
Sugar, granulated	Pound	9.8	7.1	7.0	5.7	10.5	8.2	8.3	10.9	8.9	8.5
Tea	do	81.5	93.3	93.6	56.0	76.9	76.8	76.5	62.5	64.1	65.9
Coffee	do	37.5	52.1	52.2	30.0	44.1	57.3	57.6	39.6	51.9	52.8
Prunes	do	16.2	16.0	15.6		18.6	16.8	17.2	21.2	20.1	20.3
Raisins	do	15.5	14.2	14.2		17.6	16.6	16.6	16.6	15.1	15.1
Bananas	Dozen	36.1	33.3	34.6		13.7	13.5	13.3	13.3	12.0	12.3
Oranges	do	34.5	43.3	48.1		37.6	42.8	44.7	40.1	40.0	43.9

¹ The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Philadelphia, Pa.				Pittsburgh, Pa.				Portland, Me.				Portland, Oreg.				Providence, R. I.			
Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	Mar. 15, 1924	Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	
1913	1924			1913	1924						1913	1924			1913	1924			
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	
28.6	49.1	48.9	51.8	26.0	42.6	44.4	44.5	55.8	59.2	60.5	22.4	29.1	27.6	28.4	39.2	69.1	68.8	68.9	
23.5	38.3	37.0	38.4	22.0	35.0	36.5	36.5	43.8	44.4	45.7	20.0	25.7	24.8	25.4	29.8	47.0	46.1	46.9	
21.4	33.2	33.5	35.0	21.8	32.3	33.2	33.2	29.4	28.4	30.0	18.7	24.8	23.3	23.6	24.4	37.0	36.8	37.0	
16.5	20.9	20.9	21.4	16.2	22.0	22.6	23.1	19.6	19.5	20.2	15.8	17.7	16.5	17.1	18.4	27.1	27.6	27.7	
11.4	11.1	10.2	10.8	11.6	11.6	11.6	12.6	15.2	14.9	15.3	13.0	12.7	11.6	12.0	18.2	18.2	18.2	18.6	
20.3	30.0	33.3	40.2	21.3	29.4	32.2	38.7	26.8	31.4	38.9	20.2	27.2	32.1	37.4	20.0	30.2	34.9	43.1	
23.8	34.5	36.9	40.9	28.1	39.8	43.3	46.5	35.8	40.2	42.6	28.1	40.7	54.3	48.9	21.8	34.7	39.5	43.6	
29.7	47.3	53.7	57.5	28.8	51.4	54.5	57.5	45.4	49.8	53.8	29.7	46.2	48.6	51.5	28.5	51.6	55.2	57.9	
18.6	38.4	39.0	40.1	22.5	39.2	40.6	40.0	37.3	39.1	40.8	17.6	34.4	36.8	36.6	19.3	41.8	41.1	42.5	
21.8	38.4	38.7	39.4	26.4	42.1	43.1	42.1	39.6	38.9	39.8	21.5	32.4	31.9	32.2	23.0	40.4	41.0	41.1	
8.0	26.1	28.5	28.4	8.8	27.7	29.0	28.7	27.6	29.3	29.3	9.3	36.0	34.5	31.2	9.0	30.3	30.7	30.5	
47.5	12.1	11.5	11.4	43.4	11.8	11.0	11.1	13.6	12.2	12.3	44.5	11.0	10.5	10.3	42.2	12.4	11.4	11.6	
31.6	62.2	54.0	58.8	59.5	51.9	58.5	62.3	53.5	55.5	55.5	55.6	51.3	53.4	53.4	58.9	49.6	51.3	51.3	
28.3	31.6	31.5	31.3	31.0	31.0	31.9	31.7	31.9	32.4	32.0	29.8	30.0	30.0	30.0	29.1	31.0	31.0	31.0	
25.0	28.3	30.6	30.2	24.5	28.7	30.0	30.2	28.2	28.2	28.3	20.5	29.2	29.8	29.7	28.9	28.7	28.8	28.8	
15.0	38.0	37.5	38.8	15.1	39.0	39.1	38.8	38.4	36.8	36.6	17.9	37.9	38.2	38.3	22.3	36.4	34.8	35.1	
24.6	16.0	22.0	22.5	16.7	21.7	22.5	17.5	22.5	22.9	22.9	27.7	19.3	23.0	24.3	15.2	17.3	21.9	22.6	
25.4	24.6	25.7	25.5	25.4	24.8	26.2	26.1	23.6	25.5	25.9	24.5	27.7	28.9	29.2	25.5	27.2	27.1	27.1	
4.8	36.6	60.7	40.5	37.6	58.6	41.8	42.6	67.8	45.3	45.3	26.8	35.3	36.6	31.8	50.9	69.6	50.2	50.2	
3.2	8.5	9.3	9.3	5.4	8.5	9.1	9.2	9.3	10.4	10.4	5.6	9.6	9.6	9.6	6.0	8.7	8.8	8.8	
2.8	4.6	6.4	6.3	3.1	4.4	6.2	6.5	4.5	6.4	6.4	2.9	4.0	5.8	5.9	3.4	5.0	7.0	6.9	
8.2	4.2	5.2	5.3	2.7	4.6	6.2	6.0	4.7	5.5	5.5	3.4	4.0	5.8	5.8	2.9	4.3	5.3	5.4	
8.8	8.2	8.7	8.8	9.0	9.0	9.4	9.4	6.9	7.7	7.6	9.3	10.3	10.3	10.3	9.3	9.3	9.3	9.4	
23.7	8.8	10.0	10.1	9.5	9.5	10.4	10.4	9.7	11.4	11.5	11.4	11.4	11.4	11.4	9.7	10.8	10.9	10.9	
20.5	23.7	23.6	23.7	24.3	24.7	25.0	24.6	25.3	25.3	25.3	25.9	26.3	26.3	26.3	24.2	24.6	24.2	24.2	
9.8	20.5	21.4	21.5	20.8	23.0	22.9	23.7	24.4	24.6	24.6	17.5	17.9	18.1	18.1	23.4	23.3	23.7	23.7	
2.1	10.7	11.5	11.8	10.2	11.4	11.5	10.6	11.7	11.7	11.7	8.6	9.8	10.7	10.7	9.3	9.6	11.0	11.0	
5.1	9.9	10.1	10.2	9.4	9.5	9.8	10.1	10.8	10.7	10.7	9.8	10.5	10.7	10.7	10.2	10.3	10.3	10.3	
7.0	3.2	3.0	2.8	2.6	2.3	2.2	2.7	2.0	1.8	1.8	0.7	2.2	2.7	2.7	1.6	2.8	2.2	1.9	
11.2	5.1	5.2	5.2	5.9	6.1	5.7	5.9	5.6	5.6	5.6	3.9	5.9	5.3	5.3	6.0	5.5	5.4	5.4	
15.0	7.0	4.6	4.5	7.1	5.2	5.8	5.1	3.1	3.1	3.1	6.4	6.6	6.1	6.1	7.1	4.9	5.8	5.8	
16.3	11.2	11.2	11.0	12.5	12.5	12.6	15.2	15.4	15.8	15.8	14.9	14.9	14.9	14.9	12.1	12.1	12.1	12.1	
4.9	15.0	15.1	16.5	15.9	17.7	17.2	16.8	17.4	17.4	17.4	19.0	20.8	20.8	20.8	17.4	18.1	18.6	18.6	
54.0	16.3	15.2	16.4	17.6	17.7	17.8	20.2	19.7	20.0	20.0	18.8	19.4	19.4	19.4	20.0	19.8	19.9	19.9	
25.0	11.8	12.6	12.8	13.1	13.9	13.9	23.0	14.7	14.7	14.7	16.4	17.1	17.3	17.3	12.5	15.1	15.3	15.3	
34.1	4.9	9.8	7.0	10.4	7.8	7.7	10.3	7.6	7.4	7.4	10.5	8.1	8.2	8.2	10.3	7.3	7.1	7.1	
15.7	60.4	68.4	70.1	75.5	79.0	79.2	60.5	63.9	63.6	63.6	55.0	71.1	77.8	77.9	48.3	58.8	60.6	61.6	
37.5	34.1	46.6	46.9	41.0	51.6	51.9	45.3	55.1	55.5	55.5	35.0	43.2	53.1	53.1	30.0	46.7	55.5	55.1	
13.0	15.7	15.3	15.2	18.9	18.9	19.1	16.5	15.6	16.3	16.3	10.3	11.6	11.6	11.6	18.4	17.8	17.9	17.9	
33.7	15.0	13.6	13.7	14.7	14.3	14.3	14.1	13.6	13.5	13.5	14.5	13.6	13.6	13.6	15.1	14.5	14.5	14.5	
37.5	33.7	33.9	33.2	43.5	43.9	44.2	12.1	11.8	11.6	11.6	16.4	12.8	11.2	11.2	34.5	32.9	35.0	35.0	
37.5	37.5	45.1	53.5	41.8	46.9	52.6	38.5	45.2	50.9	50.9	36.7	44.8	44.7	44.7	41.2	52.1	55.2	55.2	

* No. 3 can.

* No. 2½ can.

* Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Richmond, Va.			Rochester, N. Y.			St. Louis, Mo.		
		Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	Mar. 15, 1924	Feb. 15, 1925	Mar. 15, 1925	Mar. 15—	
		1913	1924						1913	1924
Sirloin steak	Pound	Cts. 22.2	Cts. 38.7	Cts. 38.8	Cts. 38.7	Cts. 39.2	Cts. 38.9	Cts. 39.7	Cts. 22.8	Cts. 35.0
Round steak	do	19.6	35.1	33.8	33.5	32.9	31.9	33.0	20.2	32.5
Rib roast	do	18.9	30.3	30.3	30.1	29.0	29.9	30.3	18.4	28.2
Chuck roast	do	15.3	21.9	21.5	22.1	22.8	22.6	23.0	15.4	19.1
Plate beef	do	11.4	15.6	15.0	14.9	12.1	12.4	12.8	10.7	13.1
Pork chops	do	19.4	27.3	29.9	37.9	28.2	33.1	39.9	18.0	23.5
Bacon, sliced	do	23.6	30.5	35.3	37.6	32.8	37.2	39.8	23.8	35.3
Ham, sliced	do	24.0	37.1	39.1	40.8	43.8	47.3	50.1	26.7	42.6
Lamb, leg of	do	19.3	43.6	44.2	44.9	36.6	39.4	38.9	17.1	35.4
Hens	do	22.0	35.8	35.2	36.5	39.9	40.6	41.0	18.6	32.5
Salmon, canned, red	do		31.6	32.8	32.9	29.0	30.3	30.4		32.4
Milk, fresh	Quart	10.0	14.0	14.0	14.0	12.5	13.5	13.5	8.0	13.0
Milk, evaporated	15-16 oz. can		13.6	12.7	12.6	12.1	11.6	11.7		11.1
Butter	Pound	44.2	65.9	55.6	60.4	55.9	50.1	54.9	41.2	50.3
Oleomargarine	do		30.6	32.2	32.6	31.2	33.3	33.6		27.9
Nut margarine	do		29.6	30.3	30.6	28.7	28.8	28.8		25.2
Cheese	do	22.3	36.5	36.5	36.5	37.4	36.8	37.3	20.3	34.0
Lard	do	15.0	17.1	22.3	22.5	17.2	22.3	23.2	13.6	13.3
Vegetable lard substitute	do		24.6	25.3	25.8	22.2	24.9	25.3		24.9
Eggs, strictly fresh	Dozen	21.8	32.9	50.8	33.9	38.3	60.7	38.8	22.0	30.2
Bread	Pound	5.3	8.5	9.6	9.4	8.1	8.7	8.7	5.5	8.9
Flour	do	3.3	4.5	6.3	6.3	4.5	6.5	6.5	3.0	4.2
Corn meal	do	2.0	4.5	5.1	5.0	5.0	6.3	6.4	2.1	3.8
Rollod oats	do		9.1	9.5	9.5	8.4	9.6	9.2		8.4
Corn flakes	8-oz. pkg		9.6	11.1	11.0	9.5	10.7	10.8		9.0
Wheat cereal	28-oz. pkg		25.3	25.6	25.3	24.0	24.1	24.1		23.6
Macaroni	Pound		20.4	20.8	20.8	18.3	22.6	22.6		20.1
Rice	do	9.8	11.6	12.4	12.6	10.0	11.2	11.2	8.6	9.2
Beans, navy	do		10.8	11.4	11.1	10.0	10.0	10.2		8.9
Potatoes	do	1.7	3.4	3.1	3.0	2.1	1.5	1.5	1.3	2.7
Onions	do		6.8	7.1	7.0	5.7	5.2	5.4		5.5
Cabbage	do		7.5	5.1	5.6	5.8	2.4	3.7		4.8
Beans, baked	No. 2 can		11.6	10.9	11.0	11.2	11.2	11.1		11.3
Corn, canned	do		14.7	15.8	15.9	16.0	17.6	17.3		15.4
Peas, canned	do		20.1	20.4	20.4	19.3	19.9	20.0		17.4
Tomatoes, canned	do		11.8	12.7	12.6	13.4	15.4	15.2		12.8
Sugar, granulated	Pound	5.1	10.4	7.4	7.3	9.9	7.2	7.0	5.1	10.4
Tea	do	56.0	81.8	90.8	88.9	63.6	67.6	68.7	55.0	70.7
Coffee	do	27.4	39.5	50.3	49.9	36.6	50.0	50.9	24.3	39.9
Prunes	do		19.6	19.4	19.5	19.0	18.7	19.7		20.9
Raisins	do		15.0	14.3	13.9	14.3	14.2	14.1		15.6
Bananas	Dozen		40.0	38.6	38.8	44.0	43.3	42.7		34.4
Oranges	do		35.4	38.6	43.5	39.3	49.4	50.7		40.8

¹ No. 2½ can.

CITIES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

St. Paul, Minn.			Salt Lake City, Utah			San Francisco, Calif.			Savannah, Ga.			Scranton, Pa.			
Mar. 15, 1924	Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	Mar. 15—		Feb. 15, 1925	Mar. 15, 1925	Mar. 15, 1925	Feb. 15, 1925	Mar. 15, 1925	Mar. 15, 1925	Mar. 15, 1925
			1913	1924			1913	1924				1913	1924		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
32.9	33.9	34.8	22.1	28.0	27.6	28.8	20.3	31.5	30.7	31.4	30.0	30.7	31.8	22.8	49.0
26.9	27.8	28.2	19.3	24.2	24.3	25.2	19.0	28.9	27.8	28.3	25.5	24.7	26.1	18.5	39.6
25.8	27.0	27.8	18.5	21.0	20.8	21.4	20.7	30.2	29.7	30.1	25.0	25.4	26.1	18.8	35.9
19.9	21.3	21.8	15.0	17.3	16.5	16.7	14.0	19.7	19.4	19.4	15.8	14.7	16.1	14.9	26.0
11.1	11.7	12.1	11.4	12.1	11.4	11.9	12.9	15.8	14.9	15.3	13.0	12.7	13.4	10.5	10.9
24.4	27.7	36.7	21.7	25.6	30.1	38.6	24.0	33.7	38.5	43.0	25.9	27.7	29.7	19.5	29.4
35.5	40.1	45.3	31.7	38.9	39.9	45.9	32.8	48.3	53.3	55.4	30.2	35.1	37.9	24.2	40.2
39.9	44.4	49.5	29.3	40.8	45.3	50.6	30.0	51.1	55.5	57.7	33.5	38.0	40.0	27.0	52.8
33.2	34.3	34.4	18.2	33.1	33.4	35.3	17.3	37.0	38.9	38.8	41.3	40.0	42.0	20.7	44.2
30.5	31.3	33.4	24.7	31.5	29.1	29.8	23.8	41.3	42.3	41.5	33.3	33.9	33.9	22.5	42.6
35.8	35.1	35.0	---	35.6	36.1	34.4	---	27.2	28.6	28.4	34.1	30.2	31.0	---	33.9
11.0	11.0	11.0	8.7	10.0	11.5	11.5	10.0	14.0	14.0	14.0	17.5	17.5	17.5	8.8	11.0
12.4	11.7	11.7	---	11.3	9.9	9.9	---	10.1	9.9	9.9	11.4	11.0	11.1	---	12.4
52.7	43.9	50.8	40.6	52.0	48.4	51.7	42.9	58.1	55.7	55.2	60.5	53.3	58.2	40.6	58.1
30.2	31.0	28.3	---	---	---	---	---	29.6	28.8	28.8	33.9	35.3	35.5	---	32.3
26.4	28.3	28.0	---	29.7	30.0	30.3	---	29.0	29.3	29.3	32.5	32.3	32.2	---	25.0
35.0	33.9	34.0	24.2	30.7	30.5	29.8	20.0	38.2	36.3	36.3	35.2	35.1	35.3	18.8	36.3
17.6	22.3	23.1	18.7	18.5	24.6	25.3	16.9	20.4	24.7	25.0	17.6	22.0	22.3	15.8	18.1
23.7	27.8	27.5	---	29.0	29.7	29.6	---	26.4	28.2	28.4	19.1	19.4	20.0	---	25.6
26.9	43.5	35.1	23.1	24.6	58.1	31.8	23.5	29.6	36.2	39.5	33.4	47.3	32.4	26.3	42.1
9.3	10.3	10.3	5.9	9.8	10.8	10.8	5.7	9.1	10.1	9.9	8.6	10.2	10.2	5.6	9.0
4.2	5.9	5.9	2.5	3.2	5.9	5.9	3.3	4.8	6.7	6.7	5.3	7.1	7.1	3.4	5.0
3.9	5.6	5.6	3.4	3.9	5.6	5.7	3.4	4.6	5.9	5.8	3.3	4.1	4.1	---	5.6
9.7	9.4	9.6	---	9.1	9.0	9.0	---	9.7	9.8	9.6	8.6	9.1	9.1	---	9.7
10.0	12.0	12.3	---	11.2	12.2	12.1	---	10.6	10.7	10.7	9.0	10.3	10.3	---	10.0
25.0	24.8	25.0	---	24.9	24.9	24.9	---	23.0	24.3	24.4	23.7	23.6	23.8	---	25.5
18.7	18.9	19.3	---	19.2	19.0	19.3	---	14.1	14.3	14.3	17.2	18.1	18.2	---	23.1
10.2	10.4	10.9	8.2	8.9	10.7	11.0	8.5	9.3	10.9	10.9	8.6	9.8	9.8	8.5	9.9
9.7	9.9	9.8	---	10.2	11.1	11.1	---	9.7	10.4	10.4	10.4	10.8	10.9	---	11.8
1.8	1.4	1.4	0.9	1.8	2.2	2.2	1.2	3.3	3.5	3.5	3.1	2.8	2.7	1.5	2.5
6.5	5.7	6.1	---	4.6	6.3	6.4	---	3.5	6.7	6.3	6.7	6.8	7.3	---	5.8
5.8	3.4	3.8	---	4.7	5.4	5.8	---	---	---	---	6.6	4.8	4.7	---	7.2
14.4	13.8	13.9	---	15.2	14.7	14.7	---	13.5	14.1	14.3	12.4	12.4	12.4	---	12.1
15.2	15.8	16.0	---	14.6	16.7	16.7	---	17.4	18.8	18.8	14.4	19.6	19.6	---	17.3
17.4	16.9	16.9	---	15.4	16.6	16.7	---	18.3	19.2	19.0	18.5	18.5	18.1	---	18.3
14.4	14.7	14.8	---	13.5	15.9	15.9	---	15.1	15.9	15.9	10.5	11.9	11.9	---	13.2
10.8	8.3	8.4	6.3	11.0	8.3	8.5	5.3	10.1	7.3	7.7	10.0	7.2	7.4	6.1	10.2
67.9	74.3	74.3	65.7	82.6	84.7	85.2	50.0	60.4	68.1	68.0	66.8	76.1	77.0	52.5	61.3
43.6	53.5	54.4	35.8	48.0	57.6	57.6	32.0	41.9	52.7	52.4	35.9	49.3	49.9	31.3	40.7
19.9	18.4	17.8	---	15.7	16.2	16.7	---	16.2	15.6	15.7	15.7	15.2	15.5	---	16.8
17.4	15.5	15.2	---	14.8	13.3	13.4	---	13.8	13.3	13.4	15.2	13.6	13.7	---	15.1
14.4	12.4	12.4	---	17.6	16.8	16.7	---	37.5	36.7	37.2	38.8	31.4	31.3	---	34.4
52.1	51.2	50.9	---	33.8	40.1	42.9	---	37.8	48.8	47.2	26.5	36.2	43.8	---	45.5

Per pound.

Comparison of Retail Food Costs in 51 Cities

TABLE 6 shows for 39 cities the percentage of increase or decrease in the total cost of food in March, 1925, compared with the average cost in the year 1913, in March, 1924, and in February, 1925. For 13 other cities comparisons are given for the one-month and the one-month periods. These cities have been scheduled by the Bureau at different dates since 1913. These percentage changes are based on actual retail prices secured each month from retail dealers and on the average family consumption of these articles in each city.

*For list of articles see note at p. 46.
 *The consumption figures used from January, 1913, to December, 1920, for each article in each city are given in the MONTHLY LABOR REVIEW for November, 1921, pp. 24 and 25. The consumption figures which have been used for each month beginning with January, 1921, are given in the MONTHLY LABOR REVIEW for March, 1921, p. 28.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Article	Unit	Seattle, Wash.				Springfield, Ill.				Washington, D. C.			
		Mar. 15—		Feb. 15,	Mar. 15,	Mar. 15,	Feb. 15,	Mar. 15,		Mar. 15—		Feb. 15,	Mar. 15,
		1913	1924	1925	1925	1924	1925	1925		1913	1924	1925	1925
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.		Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	21.8	32.4	31.7	32.3	33.7	30.5	32.7	26.4	43.2	42.8	43.8	
Round steak	do	20.0	27.8	26.5	27.8	32.9	30.1	32.1	23.1	36.1	36.6	37.3	
Rib roast	do	18.2	26.2	25.8	26.9	22.5	21.7	22.3	21.0	33.5	33.1	35.2	
Chuck roast	do	15.0	18.0	17.3	17.9	19.9	19.1	19.5	16.6	23.4	22.1	23.0	
Plate beef	do	11.2	18.9	13.9	13.9	12.7	11.8	12.5	11.7	13.1	12.5	12.5	
Pork chops	do	23.4	30.6	34.6	40.4	24.1	26.4	35.3	21.9	27.9	32.5	40.8	
Bacon, sliced	do	30.0	44.8	49.0	53.0	37.3	39.6	41.8	25.4	31.9	39.1	42.3	
Ham, sliced	do	30.0	48.3	52.5	57.3	43.0	47.8	50.0	28.6	51.8	54.3	57.9	
Lamb, leg of	do	18.2	34.6	36.6	37.3	40.7	40.7	40.7	21.4	40.3	42.0	44.3	
Hens	do	24.0	33.7	32.3	32.7	32.3	33.7	36.3	22.1	39.2	39.4	40.6	
Salmon, canned, red	do		30.3	32.2	31.8	34.6	33.6	33.6		27.9	28.5	28.4	
Milk, fresh	Quart	8.6	12.0	12.0	12.0	12.5	12.5	12.5	9.0	15.0	14.0	14.0	
Milk, evaporated	15-16 oz. can		10.7	10.3	10.4	12.9	11.8	11.8		12.4	11.7	11.7	
Butter	Pound	44.0	57.0	52.2	53.6	58.3	48.3	57.1	44.1	60.7	54.1	58.2	
Oleomargarine	do		30.5			31.6	32.0	31.3		30.6	30.9	31.3	
Nut margarine	do		29.8	30.2	30.0	30.0	31.4	30.8		28.8	28.8	28.8	
Cheese	do	21.6	35.5	34.2	34.4	38.0	36.8	37.8	23.5	38.3	40.3	39.6	
Lard	do	17.3	18.8	23.9	24.0	17.6	22.7	23.0	14.6	16.7	21.8	22.5	
Vegetable lard substitute	do		27.8	28.6	28.7	27.6	28.6	29.3		24.9	24.7	25.1	
Eggs, strictly fresh	Dozen	23.5	30.8	41.3	38.9	29.7	48.3	32.0	22.6	34.8	61.4	37.5	
Bread	Pound	5.5	9.8	10.3	10.3	10.2	10.9	10.5	5.5	9.0	8.8	8.7	
Flour	do	3.0	4.2	6.3	6.1	4.6	6.8	6.6	3.6	4.8	6.6	6.7	
Corn meal	do	3.0	4.2	5.8	5.9	5.0	5.9	6.0	2.5	4.3	5.4	5.3	
Rolled oats	do		8.7	9.1	8.8	10.7	10.3	10.4		9.1	9.3	9.4	
Corn flakes	8-oz. pkg		11.7	12.1	12.1	10.5	11.5	11.8		9.4	10.5	10.6	
Wheat cereal	28-oz. pkg		25.4	26.0	26.2	25.3	26.5	26.5		23.8	23.8	23.6	
Macaroni	Pound		18.1	17.8	17.8	19.8	21.0	20.9		21.1	22.1	22.1	
Rice	do	7.7	11.7	12.2	12.3	10.5	10.9	10.8	9.4	10.2	11.3	11.3	
Beans, navy	do		10.4	11.1	11.1	9.3	9.9	9.9		9.6	9.8	9.7	
Potatoes	do	0.9	2.4	3.0	2.8	2.6	2.4	2.6	1.5	2.8	2.5	2.5	
Onions	do		4.8	6.8	7.0	6.7	7.9	7.8		6.3	6.0	6.4	
Cabbage	do		6.7	7.1	7.3	6.0	5.0	4.8		7.8	5.9	5.9	
Beans, baked	No. 2 can		16.2	14.5	14.5	13.2	11.8	12.0		11.8	11.2	11.1	
Corn, canned	do		17.6	19.7	19.6	14.8	17.5	17.7		14.7	17.4	17.6	
Peas, canned	do		19.5	21.4	21.3	18.1	18.9	19.1		16.5	16.9	16.7	
Tomatoes, canned	do		16.4	18.5	18.5	14.6	15.6	15.6		10.9	12.5	12.7	
Sugar, granulated	Pound	6.1	10.8	8.3	8.4	11.6	8.6	8.4	5.0	9.8	7.3	7.1	
Tea	do	50.0	74.8	80.5	79.6	77.5	74.5	74.5	57.5	76.3	82.4	81.3	
Coffee	do	28.0	43.4	53.8	51.9	38.5	54.4	55.5	28.8	36.9	48.7	48.6	
Prunes	do		14.3	14.8	15.2	18.8	16.0	16.2		19.2	19.1	18.6	
Raisins	do		15.6	14.7	14.8	16.5	15.8	15.4		15.0	13.9	13.5	
Bananas	Dozen		15.7	12.7	12.7	12.7	12.1	12.2		40.0	38.6	38.6	
Oranges	do		40.9	48.6	46.5	35.2	44.3	52.0		37.3	44.3	47.4	

¹ No. 2½ can.² Per pound.

Comparison of Retail Food Costs in 51 Cities

TABLE 6 shows for 39 cities the percentage of increase or decrease in the retail cost of food⁵ in March, 1925, compared with the average cost in the year 1913, in March, 1924, and in February, 1925. For 12 other cities comparisons are given for the one-year and the one-month periods. These cities have been scheduled by the bureau at different dates since 1913. These percentage changes are based on actual retail prices secured each month from retail dealers and on the average family consumption of these articles in each city.⁶

⁵ For list of articles see note 6, p. 40.⁶ The consumption figures used from January, 1913, to December, 1920, for each article in each city is given in the MONTHLY LABOR REVIEW for November, 1918, pp. 94 and 95. The consumption figures which have been used for each month beginning with January, 1921, are given in the MONTHLY LABOR REVIEW for March, 1921, p. 26.

Effort has been made by the bureau each month to have perfect reporting cities. For the month of March 99.6 per cent of all the firms reporting in the 51 cities sent in a report promptly. The following were perfect reporting cities—that is, every merchant in the following-named 45 cities who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages: Atlanta, Baltimore, Boston, Bridgeport, Buffalo, Butte, Charleston, Cincinnati, Cleveland, Columbus, Dallas, Denver, Detroit, Fall River, Houston, Indianapolis, Jacksonville, Kansas City, Little Rock, Manchester, Memphis, Milwaukee, Minneapolis, Mobile, Newark, New Haven, New Orleans, New York, Norfolk, Omaha, Peoria, Philadelphia, Pittsburgh, Portland, Me., Portland, Oreg., Providence, Richmond, Rochester, St. Louis, St. Paul, Savannah, Scranton, Seattle, Springfield, Ill., and Washington, D. C.

The following summary shows the promptness with which the merchants responded in March, 1925.

RETAIL PRICE REPORTS RECEIVED DURING MARCH, 1925

Item	United States	Geographical division				
		North Atlantic	South Atlantic	North Central	South Central	Western
Percentage of reports received.....	99.6	100	100	99.7	99	99
Number of cities in each section from which every report was received.....	45	14	9	13	6	4

TABLE 6.—PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN MARCH, 1925, COMPARED WITH THE COST IN FEBRUARY, 1925, MARCH, 1924, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES

City	Percentage increase March, 1925, compared with—		Percentage decrease March, 1925, compared with February, 1925	City	Percentage increase March, 1925, compared with—		Percentage decrease March, 1925, compared with February, 1925
	1913	March, 1924			1913	March, 1924	
Atlanta.....	50.1	6.8	0.3	Minneapolis.....	49.6	4.7	1.4
Baltimore.....	57.4	5.6	0.3	Mobile.....		6.8	0.8
Birmingham.....	60.4	9.4	0.3	Newark.....	44.6	1.6	0.9
Boston.....	49.2	2.5	2.2	New Haven.....	47.3	1.9	2.4
Bridgeport.....		1.6	2.1	New Orleans.....	52.8	6.7	1.0
Buffalo.....	55.5	6.0	1.0	New York.....	54.5	4.8	0.4
Butte.....		6.7	1.0	Norfolk.....		6.5	0.9
Charleston, S. C.....	54.0	3.4	0.6	Omaha.....	49.3	4.8	1.7
Chicago.....	60.5	5.4	1.0	Peoria.....		9.1	1.3
Cincinnati.....	50.6	5.2	1.3	Philadelphia.....	51.0	4.6	1.2
Cleveland.....	50.7	6.5	1.9	Pittsburgh.....	52.1	4.6	0.5
Columbus.....		3.4	0	Portland, Me.....		2.9	3.1
Dallas.....	53.9	7.2	1.0	Portland, Oreg.....	37.6	5.4	1.5
Denver.....	33.1	1.6	1.8	Providence.....	48.4	0.7	2.9
Detroit.....	58.2	7.1	1.9	Richmond.....	58.5	4.5	1.0
Fall River.....	43.8	1.0	3.4	Rochester.....		5.3	1.4
Houston.....		10.0	1.1	St. Louis.....	54.9	7.0	1.3
Indianapolis.....	43.5	3.8	1.0	St. Paul.....		6.8	1.9
Jacksonville.....	44.1	4.1	1.3	Salt Lake City.....	35.0	10.5	2.3
Kansas City.....	51.4	8.0	1.3	San Francisco.....	50.0	6.2	1.0
Little Rock.....	45.5	8.2	1.0	Savannah.....		7.1	0.2
Los Angeles.....	45.5	4.3	1.3	Scranton.....	54.7	5.3	1.7
Louisville.....	48.1	9.6	1.0	Seattle.....	45.9	5.7	1.4
Manchester.....	43.9	0.2	3.9	Springfield, Ill.....		5.6	1.8
Memphis.....	47.1	7.5	1.8	Washington, D. C.....	50.7	5.4	1.0
Milwaukee.....	52.6	3.4	1.2				

¹ Increase. ² Decrease.

Retail Prices of Coal in the United States^a

THE following table shows the average retail prices of coal on January 15 and July 15, 1913, March 15, 1924, and February 15 and March 15, 1925, for the United States and for each of the cities from which prices have been obtained. Prices for coal are secured from the cities from which monthly retail prices of food are received.

In addition to the prices for Pennsylvania anthracite, prices are shown for Colorado, Arkansas, and New Mexico anthracite in those cities where these coals form any considerable portion of the sales for household use.

The prices shown for bituminous coal are averages of prices of the several kinds used. The coal dealers in each city are asked to quote prices on the kinds of bituminous coal usually sold for household use.

The prices quoted are for coal delivered to consumers but do not include charges for storing the coal in cellar or coal bin where an extra handling is necessary.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, MARCH 15, 1924, AND FEBRUARY 15 AND MARCH 15, 1925

City, and kind of coal	1913		1924	1925	
	Jan. 15	July 15	Mar. 15	Feb. 15	Mar. 15
United States:					
Pennsylvania anthracite—					
Stove	\$7.99	\$7.46	\$15.72	\$15.43	\$15.41
Chestnut	8.15	7.68	15.70	15.34	15.32
Bituminous	5.48	5.39	9.53	9.36	9.16
Atlanta, Ga.:					
Bituminous	5.88	4.83	8.13	7.35	7.03
Baltimore, Md.:					
Pennsylvania anthracite—					
Stove	17.70	17.24	116.75	116.25	116.25
Chestnut	17.93	17.49	116.50	115.75	115.75
Bituminous			7.70	7.50	7.55
Birmingham, Ala.:					
Bituminous	4.22	4.01	8.15	7.77	7.69
Boston, Mass.:					
Pennsylvania anthracite—					
Stove	8.25	7.50	15.50	16.00	16.00
Chestnut	8.25	7.75	15.50	16.00	16.00
Bridgeport, Conn.:					
Pennsylvania anthracite—					
Stove			16.50	15.38	15.25
Chestnut			16.50	15.38	15.25
Buffalo, N. Y.:					
Pennsylvania anthracite—					
Stove	6.75	6.54	13.63	13.66	13.72
Chestnut	6.99	6.80	13.63	13.51	13.55
Butte, Mont.:					
Bituminous			10.98	11.13	10.93
Charleston, S. C.:					
Pennsylvania anthracite—					
Stove	18.38	17.75	117.00	117.00	117.00
Chestnut	18.50	18.00	117.10	117.10	117.10
Bituminous	16.75	16.75	12.00	11.00	11.00
Chicago, Ill.:					
Pennsylvania anthracite—					
Stove	8.00	7.80	16.75	16.74	16.70
Chestnut	8.25	8.05	16.75	16.74	16.70
Bituminous	4.97	4.65	8.56	8.50	8.45
Cincinnati, Ohio:					
Bituminous	3.50	3.38	7.72	7.21	6.62
Cleveland, Ohio:					
Pennsylvania anthracite—					
Stove	7.50	7.25	15.41	14.94	14.94
Chestnut	7.75	7.50	15.41	14.94	14.94
Bituminous	4.14	4.14	8.42	8.38	8.41

¹ Per ton of 2,240 pounds.

^a Prices of coal were formerly secured semiannually and published in the March and September issues of the MONTHLY LABOR REVIEW. Since June, 1920, these prices have been secured and published monthly.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, MARCH 15, 1924, AND FEBRUARY 15 AND MARCH 15, 1925—Continued

City, and kind of coal	1913		1924	1925	
	Jan. 15	July 15	Mar. 15	Feb. 15	Mar. 15
Columbus, Ohio:					
Bituminous			\$7.24	\$6.61	\$6.63
Dallas, Tex.:					
Arkansas anthracite—					
Egg			17.75	17.75	18.00
Bituminous	\$8.25	\$7.21	14.68	14.22	14.33
Denver, Colo.:					
Colorado anthracite—					
Furnace, 1 and 2 mixed	8.88	9.00	16.75	16.33	16.25
Stove, 3 and 5 mixed	8.50	8.50	16.75	16.42	16.25
Bituminous	5.25	4.88	8.51	9.46	9.44
Detroit, Mich.:					
Pennsylvania anthracite—					
Stove	8.00	7.45	15.88	15.50	15.50
Chestnut	8.25	7.65	15.88	15.38	15.38
Bituminous	5.20	5.20	9.52	8.96	8.83
Fall River, Mass.:					
Pennsylvania anthracite—					
Stove	8.25	7.43	16.00	15.83	15.83
Chestnut	8.25	7.61	16.00	15.83	15.83
Houston, Tex.:					
Bituminous			13.17	12.63	12.33
Indianapolis, Ind.:					
Pennsylvania anthracite—					
Stove	8.95	8.00	16.75	16.50	16.50
Chestnut	9.15	8.25	16.75	16.50	16.50
Bituminous	3.81	3.70	7.12	7.20	7.24
Jacksonville, Fla.:					
Bituminous	7.50	7.00	13.00	12.00	12.00
Kansas City, Mo.:					
Arkansas anthracite—					
Furnace			16.14	15.33	15.17
Stove, No. 4			17.25	16.69	16.50
Bituminous	4.39	3.94	8.46	8.18	8.11
Little Rock, Ark.:					
Arkansas anthracite—					
Egg			15.00	15.00	15.00
Bituminous	6.00	5.33	11.33	11.00	10.90
Los Angeles, Calif.:					
Bituminous	13.52	12.50	15.50	16.31	16.00
Louisville, Ky.:					
Bituminous	4.20	4.00	8.73	7.38	7.40
Manchester, N. H.:					
Pennsylvania anthracite—					
Stove	10.00	8.50	18.00	16.25	17.00
Chestnut	10.00	8.50	17.00	15.50	16.50
Memphis, Tenn.:					
Bituminous	4.34	4.22	7.93	8.03	8.07
Milwaukee, Wis.:					
Pennsylvania anthracite—					
Stove	8.00	7.85	16.68	16.80	16.80
Chestnut	8.25	8.10	16.59	16.65	16.65
Bituminous	6.25	5.71	10.04	9.80	9.78
Minneapolis, Minn.:					
Pennsylvania anthracite—					
Stove	9.25	9.05	18.12	18.10	18.10
Chestnut	9.50	9.30	18.09	17.95	17.95
Bituminous	5.89	5.79	11.04	10.92	10.91
Mobile, Ala.:					
Bituminous			11.07	9.87	9.83
Newark, N. J.:					
Pennsylvania anthracite—					
Stove	6.50	6.25	13.45	13.62	13.58
Chestnut	6.75	6.50	13.45	13.43	13.41
New Haven, Conn.:					
Pennsylvania anthracite—					
Stove	7.50	6.25	16.00	15.20	15.20
Chestnut	7.50	6.25	16.00	15.20	15.20
New Orleans, La.:					
Bituminous	6.06	6.06	11.14	11.19	10.63
New York, N. Y.:					
Pennsylvania anthracite—					
Stove	7.07	6.66	14.33	14.42	14.42
Chestnut	7.14	6.80	14.33	14.42	14.42
Norfolk, Va.:					
Pennsylvania anthracite—					
Stove			16.00	15.50	15.50
Chestnut			16.00	15.50	15.50
Bituminous			9.00	9.27	9.27

¹ Per 10-barrel lot (1,800 pounds).

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, MARCH 15, 1924, AND FEBRUARY 15 AND MARCH 15, 1925—Continued

City, and kind of coal	1913		1924 Mar. 15	1925	
	Jan. 15	July 15		Feb. 15	Mar. 15
Omaha, Nebr.: Bituminous.....	\$6.63	\$6.13	\$10.20	\$10.07	\$10.04
Peoria, Ill.: Bituminous.....			6.38	6.64	6.65
Philadelphia, Pa.: Pennsylvania anthracite— Stove.....	1 7.16	1 6.89	1 15.57	1 15.61	1 15.36
Chestnut.....	1 7.38	1 7.14	1 15.57	1 15.46	1 15.18
Pittsburgh, Pa.: Pennsylvania anthracite— Stove.....	1 7.94	1 7.83	1 16.75	16.25	16.25
Chestnut.....	1 8.00	1 7.44	1 16.83	16.25	16.25
Bituminous.....	3 3.16	3 3.18	7.39	6.83	6.72
Portland, Me.: Pennsylvania anthracite— Stove.....			16.56	16.56	16.56
Chestnut.....			16.56	16.56	16.56
Portland, Oreg.: Bituminous.....	9.79	9.66	13.89	13.62	13.71
Providence, R. I.: Pennsylvania anthracite— Stove.....	4 8.25	4 7.50	4 16.35	4 16.00	4 16.00
Chestnut.....	4 8.25	4 7.75	4 16.35	4 16.00	4 16.00
Richmond, Va.: Pennsylvania anthracite— Stove.....	8.00	7.25	16.50	15.50	15.50
Chestnut.....	8.00	7.25	16.50	15.50	15.50
Bituminous.....	5.50	4.94	11.36	8.75	8.83
Rochester, N. Y.: Pennsylvania anthracite— Stove.....			14.10	14.25	14.25
Chestnut.....			14.10	14.15	14.15
St. Louis, Mo.: Pennsylvania anthracite— Stove.....	8.44	7.74	17.13	16.63	16.63
Chestnut.....	8.68	7.99	17.38	16.88	16.88
Bituminous.....	3.36	3.04	7.07	6.68	6.58
St. Paul, Minn.: Pennsylvania anthracite— Stove.....	9.20	9.05	18.14	18.10	18.10
Chestnut.....	9.45	9.30	18.09	17.95	17.95
Bituminous.....	6.07	6.04	11.26	11.58	11.56
Salt Lake City, Utah: Colorado anthracite— Furnace, 1 and 2 mixed.....	11.00	11.50	17.50	18.25	18.25
Stove, 3 and 5 mixed.....	11.00	11.50	17.75	18.25	18.25
Bituminous.....	5.64	5.46	7.47	8.36	8.36
San Francisco, Calif.: New Mexico anthracite— Cerrojos egg.....	17.00	17.00	26.50	26.50	26.50
Colorado anthracite— Egg.....	17.00	17.00	24.50	25.00	25.00
Bituminous.....	12.00	12.00	17.33	17.33	17.33
Savannah, Ga.: Pennsylvania anthracite— Stove.....			5 17.05	5 17.00	5 17.00
Chestnut.....			5 17.05	5 17.00	5 17.00
Bituminous.....			5 12.02	5 11.50	5 11.50
Scranton, Pa.: Pennsylvania anthracite— Stove.....	4.25	4.31	10.53	10.78	10.78
Chestnut.....	4.50	4.56	10.53	10.62	10.62
Seattle, Wash.: Bituminous.....	6 7.63	6 7.70	6 10.03	6 10.15	6 10.15
Springfield, Ill.: Bituminous.....			4.50	4.35	4.36
Washington, D. C.: Pennsylvania anthracite— Stove.....	1 7.50	1 7.38	1 16.14	1 15.79	1 15.75
Chestnut.....	1 7.65	1 7.53	1 16.06	1 15.63	1 15.58
Bituminous.....			1 9.00	1 8.64	1 8.80

¹ Per ton of 2,240 pounds.

³ Per 25-bushel lot (1,900 pounds).

⁴ Fifty cents per ton additional is charged for "binning." Most customers require binning or basketing the coal into the cellar.

⁵ All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above prices.

⁶ Prices in Zone A. The cartage charges in Zone A were as follows: January and July, 1913, \$0.50; March, 1924, and February and March, 1925, \$1.25. These charges have been included in the price.

Index Numbers of Wholesale Prices in March, 1925

WHILE wholesale prices of many commodities averaged lower in March than in February, the general level was slightly higher, according to information gathered in representative markets by the United States Department of Labor through the Bureau of Labor Statistics. The bureau's weighted index number, which includes 404 commodities or price series, registered 161 for March compared with 160.6 for the preceding month.

Among foods, advances in fresh and cured meats, lard, butter, and fruits offset declines in eggs and flour, resulting in a net increase of $1\frac{1}{4}$ per cent for the group. In the group of miscellaneous commodities, also, there was a net increase, due to rising prices of cottonseed meal, manila hemp, jute, rope, and rubber. In all other groups prices averaged lower than in February, ranging from less than one-fourth of 1 per cent in the case of farm products, clothing materials, and chemicals and drugs, to $1\frac{3}{4}$ per cent in the case of fuels and building materials. Metals and house-furnishing goods were about $1\frac{1}{2}$ per cent cheaper than in February.

Of the 404 commodities or price series for which comparable data for February and March were collected, increases were shown in 98 instances and decreases in 156 instances. In 150 instances no change in price was reported. Among foods alone there were 44 increases in price, 38 decreases, and 26 cases of no change from the preceding month.

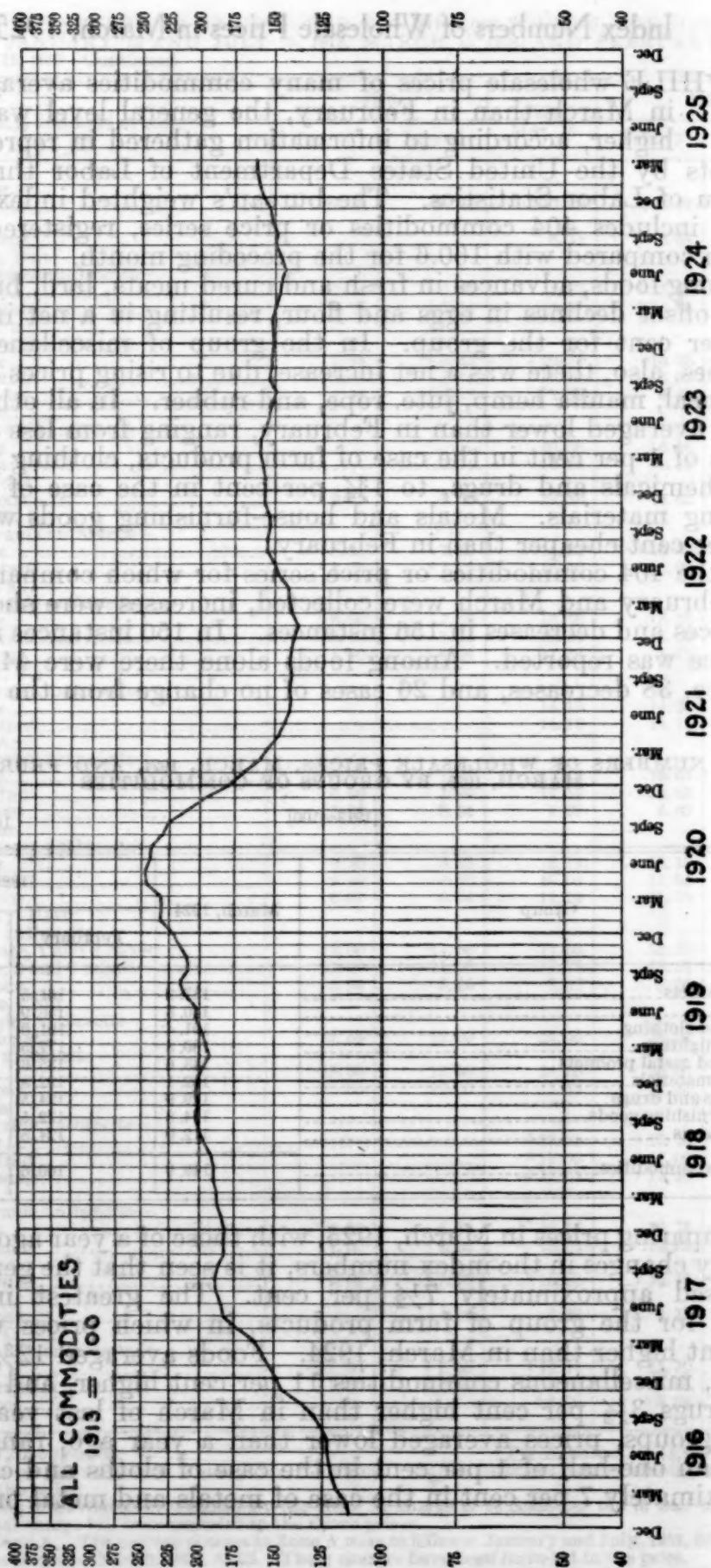
INDEX NUMBERS OF WHOLESALE PRICES, MARCH, 1924, AND FEBRUARY AND MARCH, 1925, BY GROUPS OF COMMODITIES

[1913=100]

Group	March, 1924	1925	
		February	March
Farm products.....	137.2	161.5	161.3
Foods.....	140.8	156.9	158.9
Cloths and clothing.....	191.4	191.0	190.7
Fuel and lighting.....	180.8	177.5	174.4
Metals and metal products.....	143.6	135.6	133.7
Building materials.....	182.1	182.8	179.8
Chemicals and drugs.....	129.9	134.5	134.2
House-furnishing goods.....	174.8	172.5	170.1
Miscellaneous.....	112.9	124.5	125.4
All commodities.....	149.9	160.6	161.0

Comparing prices in March, 1925, with those of a year ago, as measured by changes in the index numbers, it is seen that the general level increased approximately $7\frac{1}{2}$ per cent. The greatest increase is shown for the group of farm products, in which prices were $17\frac{1}{2}$ per cent higher than in March, 1924. Foods averaged $12\frac{3}{4}$ per cent higher, miscellaneous commodities 11 per cent higher, and chemicals and drugs $3\frac{1}{3}$ per cent higher than in March of last year. In all other groups, prices averaged lower than a year ago, ranging from less than one-half of 1 per cent in the case of cloths and clothing to approximately 7 per cent in the case of metals and metal products.

TREND OF WHOLESALE PRICES IN THE UNITED STATES, JANUARY, 1916, TO MARCH, 1925



[1020]

Agricultural and Nonagricultural Commodities

IN THE August, 1924, number of the MONTHLY LABOR REVIEW (p. 77) there was presented an explanation of a new series of index numbers of wholesale prices constructed by the Bureau of Labor Statistics at the request of the United States Department of Agriculture. It was there explained that the new series was made by combining into two groups—agricultural and nonagricultural—the weighted prices of all commodities included in the bureau's regular series of index numbers. Roughly speaking, all articles originating on American farms were placed in the first group, while all remaining articles were placed in the second. The base was also shifted from the year 1913 to the five-year period 1910–1914. Index numbers for all years and months from 1910 to 1924, inclusive, were published in the MONTHLY LABOR REVIEW for February, 1925, page 54. Figures for the period January, 1923, to March, 1925, are given in the table which follows:

INDEX NUMBERS OF WHOLESALE PRICES OF AGRICULTURAL AND NONAGRICULTURAL COMMODITIES, BY MONTHS, JANUARY, 1923, TO MARCH, 1925

[1910–1914=100]

Year and month	1923		1924		1925	
	Agricultural	Nonagricultural	Agricultural	Nonagricultural	Agricultural	Nonagricultural
Average for year	142.8	171.3	144.2	161.6		
January	141.3	176.6	144.3	163.7	160.8	164.7
February	141.9	177.7	142.7	166.3	159.4	167.3
March	144.0	179.4	139.7	165.8	162.0	165.4
April	143.5	180.4	138.7	163.7		
May	142.4	176.1	137.6	161.8		
June	140.6	172.4	135.2	159.3		
July	138.3	168.8	141.1	158.4		
August	139.3	166.7	146.6	158.9		
September	146.2	166.9	145.3	158.2		
October	146.7	165.0	150.8	158.1		
November	146.4	163.2	150.5	160.2		
December	145.5	162.0	156.4	162.8		

Average Wholesale Prices of Commodities, January to March, 1925

IN CONTINUATION of the plan of publishing each quarter in the MONTHLY LABOR REVIEW a detailed statement of wholesale prices, there is presented herewith a list of the more important commodities included in the bureau's compilation of wholesale prices, together with the latest record of price changes available at the time of its preparation. For convenience of comparison with pre-war prices, index numbers based on average prices in the year 1913 as 100 are shown in addition to the absolute money price wherever such information can be supplied. Index numbers for the several groups and subgroups also are included in the table. To show more minutely the fluctuation in prices, all index numbers are here published to one decimal fraction. Figures are given for January, February, and March, 1925.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1925

Commodity	Average prices			Index numbers (1913=100)		
	Jan., 1925	Feb., 1925	Mar., 1925	Jan., 1925	Feb., 1925	Mar., 1925
FARM PRODUCTS				163.4	161.5	161.3
Grains				201.7	198.7	179.6
Barley, malting, per bushel, Chicago	\$0.973	\$0.996	\$0.922	155.5	159.3	147.4
Corn, per bushel, Chicago—						
Contract grades	1.271	1.242	1.165	203.3	198.7	186.4
No. 3 mixed	1.214	1.186	1.121	197.2	192.6	182.1
Oats, contract grades, per bushel, Chicago	.596	.570	.492	158.5	151.7	131.0
Rye, No. 2, per bushel, Chicago	1.585	1.579	1.353	249.1	248.2	212.6
Wheat, per bushel—						
No. 1, northern spring, Chicago	1.909	1.841	1.689	209.0	201.7	184.9
No. 2, red winter, Chicago	2.006	1.984	1.767	203.3	201.1	179.2
No. 2, hard winter, Kansas City	1.866	1.848	1.678	212.9	210.8	191.3
No. 1, northern spring, Minneapolis	1.819	1.788	1.626	208.2	204.7	186.1
No. 1, hard white, Portland, Oreg	2.003	2.048	1.778	215.6	220.4	191.4
Livestock and poultry				123.2	126.9	143.8
Cattle, steers, per 100 pounds, Chicago—						
Choice to prime	10.594	10.688	11.110	118.7	119.7	124.4
Good to choice	9.313	9.469	10.200	109.5	111.3	119.9
Hogs, per 100 pounds, Chicago—						
Heavy	10.800	11.150	13.480	129.1	133.3	161.1
Light	10.381	10.950	13.430	122.8	129.5	158.9
Sheep, per 100 pounds, Chicago—						
Ewes, native, all grades	8.688	8.438	9.175	185.4	180.0	195.8
Lambs, western, medium to good	17.625	17.313	16.050	226.1	222.1	205.9
Wethers, fed, good to choice	10.500	10.250	10.450	196.4	191.7	195.4
Poultry, live fowls, per pound—						
Chicago	.184	.241	.272	119.7	156.6	176.5
New York	.335	.305	.331	200.1	182.2	197.7
Other farm products				182.6	175.7	167.9
Beans, medium, choice, per 100 pounds, New York	6.988	7.213	6.835	175.1	180.8	171.3
Clover seed, contract grades, per 100 pounds, Chicago	31.692	31.909	30.000	191.9	193.2	181.6
Cotton, middling, per pound—						
New Orleans	.237	.247	.255	186.6	194.6	200.7
New York	.240	.247	.256	188.0	193.0	200.2
Cottonseed, per ton, average price at gin	37.500	37.140	38.210	172.1	170.4	175.4
Eggs, fresh, per dozen—						
Firsts, western, Boston	.600	.423	.306	238.6	168.0	121.8
Firsts, Chicago	.558	.393	.287	246.9	174.2	127.2
Extra firsts, Cincinnati	.570	.381	.273	254.8	170.1	122.0
Candled, New Orleans	.490	.411	.311	209.1	175.5	132.7
Firsts, New York	.594	.436	.304	238.7	175.2	122.1
Extra firsts, western, Philadelphia	.605	.416	.320	229.5	157.9	121.4
Extra, pullets, San Francisco	.484	.281	.306	180.7	105.0	114.4
Flaxseed, No. 1, per bushel, Minneapolis	3.138	3.067	2.917	232.6	227.3	216.2
Hay, per ton—						
Alfalfa, No. 1, Kansas City	22.700	19.750	20.063	160.0	139.2	141.4
Clover, mixed, No. 1, Cincinnati	16.750	15.625	15.563	107.5	100.3	99.9
Timothy, No. 1, Chicago	22.250	20.875	20.800	138.8	130.2	129.8
Hides and skins, per pound—						
Calfskins, No. 1, country, Chicago	.215	.215	.204	114.0	114.0	108.1
Goatskins, Brazilian, New York	.825	.894	.860	116.1	125.7	120.9
Hides, heavy, country cows, No. 1, Chicago	.127	.122	.112	84.1	81.0	74.2
Hides, packers', heavy, native steers, Chicago	.169	.163	.148	92.1	88.7	80.2
Hides, packers', heavy, Texas steers, Chicago	.161	.158	.144	88.9	87.4	79.5
Hops, prime to choice, per pound—						
New York State, New York	.323	.330	.316	121.1	123.9	118.7
Pacifies, Portland, Oreg	.149	.167	.157	86.9	97.1	91.3
Milk, fluid, per quart—						
Chicago	.062	.062	.062	144.6	144.6	144.6
New York	.083	.083	.080	186.5	186.5	179.7
San Francisco	.068	.068	.068	158.1	158.1	158.1
Onions, fresh, yellow, per 100 pounds, Chicago	2.875	3.344	3.150	182.9	212.6	200.4
Peanuts, No. 1, per pound, Norfolk, Va.	.063	.070	.070	176.6	198.0	198.3
Potatoes—						
White, good to choice, per 100 pounds, Chicago	1.231	1.206	1.190	120.3	117.8	116.2
Sweet, No. 1, per five-eighths bushel, Philadelphia	1.830	1.650	1.581	379.2	341.9	327.7
Rice, per pound, New Orleans—						
Blue Rose, head, clean	.061	.063	.064	(1)	(1)	(1)
Honduras, head, clean	.066	.067	.068	130.8	132.0	133.1
Tobacco, leaf, per 100 pounds—						
Burley, good leaf, dark red, Louisville, Ky. ¹	24.500	24.500	24.500	185.6	185.6	185.6
Average warehouse sales, Kentucky	18.723	16.363	12.247	210.1	183.7	137.5

¹ No 1913 base price.² Not included in weighted index.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1925—Continued

Commodity	Average prices			Index numbers (1913=100)		
	Jan., 1925	Feb., 1925	Mar., 1925	Jan., 1925	Feb., 1925	Mar., 1925
FARM PRODUCTS—Continued						
Other farm products—Continued.						
Wool:						
Ohio, grease basis, per pound, Boston—						
Fine clothing	\$0.600	\$0.580	\$0.530	262.7	253.9	232.0
Fine delaine	.720	.680	.630	312.0	294.7	273.0
Half blood	.700	.680	.630	306.0	297.2	275.3
One-fourth and three-eighths grades	.700	.700	.650	266.0	266.0	247.0
South American, grease basis, per pound, Boston—						
Argentine crossbreds, straight quarter-blood	.507	.515	.479	149.1	151.5	140.8
Montevideo, 50s	.613	.613	.548	173.1	173.0	154.6
Territory, scoured, per pound, Boston—						
Fine and fine medium, staple	1.656	1.644	1.565	294.9	292.6	278.6
Half blood	1.475	1.444	1.440	286.9	280.9	280.1
FOODS				159.8	156.9	158.9
Meats				140.5	141.6	156.8
Beef, fresh, per pound—						
Carcass, good, native steers, Chicago	.183	.183	.183	140.9	140.9	140.9
Sides, native, New York	.150	.141	.154	119.8	112.9	122.6
Beef, salt, extra mess, per barrel (200 pounds), New York	17.500	17.500	18.500	92.5	92.5	97.8
Hams, smoked, per pound, Chicago	.219	.231	.269	132.0	139.2	161.9
Lamb, dressed, per pound, Chicago	.274	.265	.265	184.3	178.2	178.2
Mutton, dressed, per pound, New York	.150	.140	.161	146.3	136.6	156.6
Pork, fresh, per pound—						
Loins, Chicago	.174	.180	.275	117.1	121.1	185.1
Loins, western, New York	.191	.180	.268	125.4	118.2	175.6
Pork, cured—						
Mess, salt, per barrel (200 pounds), New York	35.219	36.844	40.600	156.7	164.0	180.7
Sides, rough, per pound, Chicago	.201	.196	.228	162.9	158.8	184.7
Sides, short, clear, per pound, Chicago	.204	.206	.242	160.0	161.9	189.8
Poultry, dressed, per pound—						
Hens, heavy, Chicago	.238	.256	(¹)	164.2	177.2	—
Fowls, 48-54 pounds to dozen, New York	.291	.315	.285	159.5	172.7	156.3
Veal, dressed, good, per pound, Chicago	.159	.175	.163	171.0	188.3	174.9
Butter, cheese, and milk				147.0	147.7	152.8
Butter, creamery, extra, per pound—						
Boston	.396	.408	.470	124.9	128.5	148.2
Chicago	.390	.395	.472	125.6	127.3	152.1
Cincinnati ⁴	.365	.363	.427	(¹)	(¹)	(¹)
New Orleans	.453	.445	.506	134.6	132.4	150.6
New York	.394	.404	.476	122.3	125.2	147.6
Philadelphia	.418	.419	.483	128.3	128.7	148.1
St. Louis	.401	.414	.483	129.8	134.0	156.1
San Francisco	.471	.454	.465	148.5	143.1	146.6
Cheese, whole milk, per pound—						
American, twins, Chicago	.233	.229	.231	164.0	161.8	162.6
State, fresh flats, colored, average, New York	.232	.231	.235	150.5	150.1	152.2
California, flats, fancy, San Francisco	.209	.231	.214	131.1	145.1	134.1
Milk, fluid. (See Farm products.)						
Milk, condensed, per case of 48 14-ounce tins, New York	5.875	5.875	5.875	125.0	125.0	125.0
Milk, evaporated, per case of 48 16-ounce tins, New York	4.163	4.175	4.155	117.8	118.1	117.6
Other foods				174.0	168.1	162.8
Beans, medium, choice. (See Farm products.)						
Bread, per pound before baking—						
Chicago	.075	.075	.075	174.5	174.5	174.5
Cincinnati	.062	.071	.071	174.7	199.7	199.7
New Orleans	.075	.075	.075	244.9	244.9	244.9
New York	.070	.070	.070	165.1	165.1	165.1
San Francisco	.078	.078	.078	194.5	194.5	194.5
Cocoa beans, Arriba, per pound, New York	.181	.188	.185	118.4	122.9	120.5
Coffee, Rio, No. 7, per pound, New York	.234	.224	.212	210.6	201.3	190.7
Copra, South Sea, sun dried, per pound, New York	.061	.059	.059	58.8	57.0	56.4
Eggs, fresh, per dozen. (See Farm products.)						
Fish—						
Cod, large, shore, pickled, cured, per 100 pounds, Gloucester, Mass.	8.500	8.500	8.500	126.7	126.7	126.7
Mackerel, salt, large, 3s, per barrel, Boston	14.850	15.840	15.840	133.8	142.8	142.8
Salmon, canned, Alaska, red, per dozen, factory	2.700	2.700	2.710	184.9	184.9	185.6

¹ No 1913 base price.³ No quotation.⁴ As to score.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1925—Continued

Commodity	Average prices			Index numbers (1913=100)		
	Jan., 1925	Feb., 1925	Mar., 1925	Jan., 1925	Feb., 1925	Mar., 1925
FOODS—Continued						
Other foods—Continued						
Flour, rye, white, per barrel, Minneapolis.....	\$7.988	\$8.256	\$7.110	255.8	264.4	227.7
Flour, wheat, per barrel—						
Winter patents, Kansas City.....	9.570	9.519	8.850	238.6	237.3	220.6
Winter straights, Kansas City.....	8.805	8.669	7.969	228.9	225.3	207.1
Standard patents, Minneapolis.....	9.694	9.850	9.035	211.5	214.9	197.1
Second patents, Minneapolis.....	9.413	9.600	8.740	212.9	217.1	197.6
Patents, Portland, Oreg.....	10.654	11.213	10.907	237.0	249.4	242.6
Patents, soft, winter, St. Louis.....	9.420	9.595	8.675	206.3	210.1	190.0
Straights, soft, winter, St. Louis.....	8.915	8.905	8.194	209.6	209.4	192.7
Patents, Toledo.....	9.415	9.150	8.375	199.2	193.6	177.2
Fruit, canned, per case, New York—						
Peaches, California, standard 2½s.....	1.800	1.800	1.800	118.6	118.6	118.6
Pineapples, Hawaiian, sliced, standard 2½s.....	2.750	2.750	2.750	133.9	133.9	133.9
Fruit, dried, per pound, New York—						
Apples, evaporated, State, choice.....	.136	.138	.129	189.8	191.5	179.4
Currants, Patras, cleaned.....	.108	.115	.110	140.3	150.1	143.5
Prunes, California, 60-70s.....	.077	.082	.081	117.2	124.8	122.7
Raisins, coast, seeded, bulk.....	.078	.078	.078	108.8	106.8	106.8
Fruit, fresh—						
Apples, Baldwin, per barrel, Chicago.....	6.250	6.563	7.125	196.9	206.8	224.5
Bananas, Jamaica, 9s, per bunch, New York.....	2.500	2.656	3.125	162.5	172.5	203.0
Lemons, California, choice, per box, Chicago.....	6.875	6.375	5.900	119.1	110.4	102.1
Oranges, California, choice, per box, Chicago.....	6.156	5.781	6.235	139.3	130.8	141.1
Glucose, 42° mixing, per 100 pounds, New York.....	4.260	4.260	4.260	199.3	199.3	199.3
Hominy grits, bulk, car lots, per 100 pounds, f. o. b. mill.....	2.555	(¹)	(¹)	154.8		
Lard, prime, contract, per pound, New York.....	.166	.161	.171	151.0	145.9	155.3
Meal, corn, per 100 pounds—						
White, f. o. b. mill.....	2.505	(¹)	(¹)	156.5		
Yellow, Philadelphia.....	3.450	3.438	3.431	240.6	239.8	239.4
Molasses, New Orleans, fancy, per gallon, New York.....	.665	.643	.525	174.6	168.7	137.8
Oatmeal, car lots, in sacks (90 pounds), per 100 pounds, New York.....	3.889	3.799	3.544	157.1	153.5	143.2
Oleomargarine, standard, uncolored, per pound, Chicago.....	.245	.245	.245	150.8	150.8	150.8
Oleo oil, extra, per pound, Chicago.....	.151	.122	.124	130.7	105.6	107.8
Pepper, black, per pound, New York.....	.133	.131	.124	122.9	121.0	114.7
Rice. (See Farm products.)						
Salt, American, medium, per barrel (280 pounds), Chicago.....	2.490	2.490	2.490	244.1	244.1	244.1
Sugar, per pound, New York—						
Granulated, in barrels.....	.061	.058	.059	141.7	136.5	137.7
Raw, 96° centrifugal.....	.046	.046	.047	131.1	132.0	135.1
Tallow, edible, per pound, Chicago.....	.108	.095	.103	135.4	119.3	129.5
Tea, Formosa, fine, per pound, New York.....	.350	.350	.350	141.0	141.0	141.0
Vegetables, canned, per dozen, New York—						
Corn, Maryland, standard.....	1.475	1.475	1.475	232.5	232.5	232.5
Peas, State and western, No. 5.....	1.300	1.300	1.300	150.0	150.0	150.0
Tomatoes, New Jersey, standard, No. 3.....	1.550	1.600	1.600	119.2	123.1	123.1
Vegetables, fresh. (See Farm products.)						
Vegetable oil—						
Coconut, crude, per pound, New York.....	.120	.119	.115	89.2	88.2	85.4
Corn, crude, in barrels, per pound, New York.....	.128	.121	.121	210.9	189.7	199.8
Cottonseed, prime, summer, yellow, per pound, New York.....	.112	.107	.111	154.2	147.7	153.5
Olive oil, edible, in barrels, per gallon, New York.....	2.150	2.038	2.000	127.4	120.7	118.5
Peanut crude, per pound, f. o. b. mill.....	.116	.115	.115	(¹)	(¹)	(¹)
Soya bean, crude, in barrels, per pound, New York.....	.137	.138	.134	223.7	224.7	218.6
Vinegar, cider, 40-grain, in barrels, per gallon, New York.....	.200	.200	.200	179.1	179.1	179.1
CLOTHS AND CLOTHING				191.1	191.0	190.7
Boots and shoes, per pair, factory				185.4	185.9	186.5
Children's—						
Little boy's, gun metal, blucher.....	1.615	1.615	1.615	166.5	166.5	166.5
Child's, gun metal, polish, high cut, rubber heel.....	1.663	1.663	1.663	181.7	181.7	181.7
Misses', black, vici, polish, high cut, rubber heel.....	1.948	1.948	1.948	173.2	173.2	173.2
Youths', gun metal, blucher.....	1.473	1.473	1.473	143.4	143.4	143.4
Men's—						
Black, calf, blucher.....	6.350	6.350	6.400	204.0	204.0	205.6
Black, calf, Goodyear welt, bal.....	5.000	5.072	5.150	157.9	160.2	162.6
Black, dress, Goodyear welt, side leather.....	3.150	3.198	3.250	140.8	142.9	145.3

¹ No 1913 base price.² Quotation not received.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1925—Continued

Commodity	Average prices			Index numbers (1913=100)		
	Jan., 1925	Feb., 1925	Mar., 1925	Jan., 1925	Feb., 1925	Mar., 1925
CLOTHS AND CLOTHING—Continued						
Boots and shoes, per pair, factory—Continued						
Men's—Continued						
Gun metal, Goodyear welt, blucher.....	\$4.500	\$4.500	\$4.500	230.2	230.2	230.2
Mahogany, chrome, side, Goodyear welt, bal.....	3.600	3.600	3.600	223.3	223.3	223.3
Tan, dress, Goodyear welt, calf.....	5.000	5.072	5.150	157.9	160.2	162.6
Tan, dress, Goodyear welt, side leather.....	3.350	3.374	3.400	149.7	150.8	152.0
Chocolate elk, blucher.....	1.739	1.739	1.739	122.1	122.1	122.1
Vici kid, black, Goodyear welt.....	6.000	6.000	6.000	209.3	209.3	209.3
Women's—						
Black, kid, Goodyear welt, 8½-inch lace.....	4.000	4.000	4.000	147.2	147.2	147.2
Colored, calf, Goodyear welt, lace oxford.....	4.150	4.150	4.150	190.9	190.9	190.9
Kid, black, McKay sewed, lace oxford.....	3.592	3.600	3.600	241.2	241.7	241.7
Patent leather pump, McKay sewed.....	3.600	3.600	3.600	261.8	261.8	261.8
Cotton goods, factory						
Denims, Massachusetts, 2.20 yards to the pound, per yard.....	.212	.213	.219	164.5	165.9	170.6
Drillings, brown, per yard—						
Massachusetts, D standard, 30-inch.....	.161	.159	.159	194.8	192.6	192.6
Pepperell, 29-inch, 2.85 yards to the pound.....	.165	.165	.165	200.5	200.5	200.5
Flannels, per yard—						
Colored, 4.20 yards to the pound.....	.146	.140	.140	200.3	191.8	191.8
Unbleached, 3.20 yards to the pound.....	.196	.190	.190	219.0	212.6	212.6
Ginghams, per yard—						
Amoskeag, 27-inch, 6.37 yards to the pound.....	.105	.105	.115	161.5	161.5	176.9
Lancaster, 26½-inch, 650 yards to the pound.....	.131	.131	.131	211.2	211.2	211.2
Hosiery, per dozen pairs—						
Men's half hose, combed yarn.....	1.750	1.750	1.750	217.5	217.5	217.5
Women's, cotton, silk mercerized, mock seam.....	2.275	2.319	2.325	128.4	130.8	131.3
Women's, combed yarn, 16-ounce.....	1.715	1.715	1.715	171.4	171.4	174.4
Muslin, bleached, 4/4, per yard—						
Fruit of the Loom.....	.181	.181	(*)	211.6	211.6	—
Lonsdale.....	.167	.167	.168	206.2	206.2	208.4
Rough Rider.....	.151	.153	.153	188.2	190.5	190.5
Wamsutta nainsook.....	.235	.230	.229	255.3	250.2	248.9
Print cloth, 27-inch, 7.60 yards to the pound, per yard.....	.069	.068	.069	108.6	197.4	201.2
Sheeting, brown, 4/4, per yard—						
Indian Head, 2.85 yards to the pound.....	.157	.157	.157	186.2	186.2	186.2
Pepperell, 37.5 yards to the pound.....	.148	.148	.148	201.2	201.2	201.2
Ware shoals, 4 yards to the pound.....	.108	.107	.110	175.6	174.4	178.2
Thread, 6-cord, J. & P. Coats, per spool.....	.073	.073	.073	186.0	186.0	186.0
Underwear—						
Men's shirts and drawers, per dozen garments.....	7.425	7.425	7.425	207.6	207.6	207.6
Women's union suits, combed yarn, per dozen.....	(*)	(*)	(*)	—	—	—
Yarn, per pound—						
Carded, white, mulespun, northern, 10/1, cones.....	.406	.399	.393	183.6	180.5	177.7
Carded, white, mulespun, northern, 22/1, cones.....	.437	.430	.430	176.7	173.8	173.8
Twisted, ordinary weaving, 20/2.....	.436	.421	.431	187.3	181.0	185.5
Twisted, ordinary weaving, 40/2.....	.548	.541	.558	143.1	141.2	145.6
Woolen and worsted goods, factory						
Flannel, white, 4/4, Ballard Vale, No. 3, per yard.....	1.000	1.000	1.040	215.8	215.8	224.4
Overcoating, 30 to 31 ounces, per yard.....	3.000	3.130	3.250	173.0	180.6	187.4
Suiting, per yard—						
Clay worsted, diagonal, 16-ounce.....	3.128	3.128	3.128	226.3	226.3	226.3
Middlesex, wool-dyed, blue, 16-ounce.....	3.780	3.780	3.780	244.7	244.7	244.7
Serge, 9½-ounce.....	1.530	1.530	1.530	240.2	240.2	240.2
Serge, 11-ounce.....	2.520	2.479	2.475	222.9	219.3	218.9
Trousing, cotton warp, 11/11½-ounce, per yard.....	1.700	1.739	1.800	150.2	153.7	159.0
Underwear—						
Merino shirts and drawers, per dozen garments.....	33.000	33.000	33.000	168.5	168.5	168.5
Men's union suits, 33 per cent worsted, per dozen.....	30.380	30.380	30.380	309.6	309.6	309.6
Women's dress goods, per yard—						
Broadcloth, 9½-ounce, 54-36-inch.....	2.651	2.651	2.674	201.5	201.5	203.4
French serge, 35-inch.....	.784	.800	.800	237.5	242.4	242.4
Poplar cloth, cotton warp.....	.375	.375	.375	197.4	197.4	197.4
Sicilian cloth, cotton warp, 50-inch.....	.652	.685	.685	201.7	211.8	211.8
Storm serge, double warp, 50-inch.....	1.035	1.035	1.035	184.0	184.0	184.0
Yarn, per pound—						
Crossbred stock, 2/32s.....	1.900	1.900	1.800	244.6	244.6	231.8
Half blood, 2/40s.....	2.400	2.375	2.294	215.0	212.7	205.6
Fine, domestic, 2/50s.....	2.650	2.600	2.638	251.4	246.6	250.2
Silk, etc.						
Linen shoe thread, 10s, Barbour, per pound, New York.....	1.816	1.946	1.946	203.3	217.9	217.9

*No quotation.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1925—Continued

Commodity	Average prices			Index numbers (1913=100)		
	Jan., 1925	Feb., 1925	Mar., 1925	Jan., 1925	Feb., 1925	Mar., 1925
CLOTHS AND CLOTHING—Continued						
Silk, etc.—Continued.						
Silk, raw, per pound, New York—						
China, Canton, filature, extra A.....	\$5.624	\$5.506	\$5.171	160.7	157.4	147.8
Japan, Kansai, No. 1.....	6.076	6.223	5.831	166.9	171.0	160.2
Japan, special, extra extra.....	6.370	6.517	6.125	156.4	159.9	150.3
Silk yarn, per pound, New York—						
Domestic, gray spun, 60/1.....	4.753	4.733	4.704	163.0	162.3	161.1
Domestic, gray spun, 60/2, No. 1.....	6.096	6.056	5.978	175.8	174.7	172.4
FUEL AND LIGHTING						
Anthracite coal, per gross ton.....				228.4	224.9	222.4
Average spot price for 8 cities—						
Chestnut.....	13.992	13.955	13.764	(1)	(1)	(1)
Egg.....	13.352	13.347	13.250	(1)	(1)	(1)
Pen.....	10.285	10.285	10.190	(1)	(1)	(1)
Tidewater, New York, average sales realization—						
Broken.....	11.490	(2)	(3)	258.4		
Chestnut.....	11.750	11.745	10.949	221.1	221.0	206.1
Egg.....	11.474	11.482	10.913	226.6	226.8	215.5
Stove.....	11.732	11.731	11.277	213.8	231.8	222.8
Bituminous coal.....				200.1	196.5	195.6
Baltimore, per net ton, mine run, pools 1-11-71.....	4.640	4.850	4.640	(1)	(1)	(1)
Birmingham, per net ton—						
Mine run, Jagger district.....	2.590	2.590	2.590	(1)	(1)	(1)
Prepared sizes, Jagger district.....	4.340	4.340	3.710	(1)	(1)	(1)
Screenings, Jagger district.....	2.190	2.190	2.190	(1)	(1)	(1)
Chicago, per net ton—						
Mine run, southern Illinois.....	4.450	4.450	4.450	(1)	(1)	(1)
Prepared sizes, southern Illinois.....	5.072	4.760	4.675	(1)	(1)	(1)
Screenings, central Illinois.....	3.330	3.388	3.588	(1)	(1)	(1)
Cincinnati, per net ton—						
Mine run, Kanawha.....	3.390	3.390	3.390	154.1	154.1	154.1
Mine run, New River.....	3.990	3.990	3.990	165.4	165.4	165.4
Cleveland, per net ton—						
Mine run, Ohio, Pittsburgh, No. 8.....	3.603	3.590	3.540	(1)	(1)	(1)
Prepared sizes, West Virginia, high volatile.....	4.690	4.478	4.450	(1)	(1)	(1)
Screenings, Ohio, Pittsburgh, No. 8.....	3.165	3.040	3.100	(1)	(1)	(1)
Norfolk, Va., mine run, Pocahontas, per gross ton.....	4.500	4.500	4.500	150.0	150.0	150.0
Pittsburgh, prepared sizes, per net ton.....	4.000	4.000	4.000	(1)	(1)	(1)
Indianapolis, mine run, per net ton.....	3.770	3.434	3.490	(1)	(1)	(1)
St. Louis, per net ton—						
Mine run, southern Illinois.....	3.160	3.160	3.000	(1)	(1)	(1)
Prepared sizes, southern Illinois.....	3.910	3.785	3.510	(1)	(1)	(1)
Screenings, southern Illinois.....	3.060	2.760	2.860	(1)	(1)	(1)
Other fuel and lighting.....				132.9	154.8	150.0
Coke—						
Alabama, foundry, per net ton, at oven.....	4.750	5.094	5.225	(1)	(1)	(1)
Connellsville, furnace, per net ton, at oven.....	4.638	4.075	3.520	190.1	167.0	144.3
Fuel oil, f. o. b. refinery—						
Oklahoma, 24-26, per barrel.....	1.331	1.325	1.140	147.6	146.9	126.4
Pennsylvania, 36-40, per gallon.....	.065	.068	.064	(1)	(1)	(1)
Gasoline—						
Motor, per gallon, tank wagon, New York.....	.170	.210	.205	101.0	124.8	121.8
Motor, per gallon, f. o. b. refinery—						
Oklahoma, 58-60.....	.084	.124	.111	(1)	(1)	(1)
Pennsylvania, 58-60.....	.113	.146	.140	(1)	(1)	(1)
Natural, per gallon, f. o. b. refinery, Oklahoma, Grade B.....	.084	.113	.096	(1)	(1)	(1)
Crude petroleum, per barrel, at well—						
California.....	1.010	1.270	1.270	288.6	362.9	362.9
Kansas-Oklahoma.....	1.293	1.738	1.800	138.4	186.0	192.7
Pennsylvania.....	3.063	3.625	3.670	125.0	148.0	149.8
Refined petroleum, per gallon, New York—						
Standard white, 110° fire test.....	.135	.135	.135	156.4	156.4	156.4
Water white, 150° fire test.....	.145	.145	.145	174.4	174.4	174.4

1 No. 1913 base price.

2 No quotation.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1925—Continued

Commodity	Average prices			Index numbers (1913=100)		
	Jan., 1925	Feb., 1925	Mar., 1925	Jan., 1925	Feb., 1925	Mar., 1925
METALS AND METAL PRODUCTS						
Iron and steel				136.3	135.6	133.7
Iron ore, per ton, lower lake ports—				145.7	146.1	145.1
Mesabi, Bessemer, 55 per cent.	\$5.400	\$5.400	\$5.400	130.1	130.1	130.1
Non-Bessemer, 51½ per cent.	4.750	4.750	4.750	139.7	139.7	139.7
Pig iron, per gross ton—						
Basic, valley furnace	21.875	22.000	21.300	148.8	149.6	144.8
Bessemer, Pittsburgh	24.635	24.510	24.060	143.8	143.1	140.4
Foundry, No. 2, northern, Pittsburgh	24.135	23.760	22.860	150.8	148.4	142.8
Foundry, No. 2, southern, Birmingham, Ala.	20.000	20.000	20.000	171.1	171.1	171.1
Ferromanganese, per gross ton, seaboard	111.250	115.000	115.000	190.9	197.3	197.3
Spiegeleisen, 18 and 22 per cent, per gross ton, furnace	32.250	33.375	33.000	129.0	133.5	132.0
Bar iron, per pound—						
Best refined, Philadelphia	.031	.031	.031	163.5	163.5	163.5
Common, Pittsburgh	.030	.031	.031	181.8	184.8	184.8
Bars, reinforcing, per 100 pounds, Pittsburgh	2.100	2.150	2.200	152.6	156.3	159.9
Nails, wire, per 100 pounds, Pittsburgh	2.950	2.950	2.950	162.2	162.2	162.2
Pipe, cast-iron, 6-inch, per net ton, New York	55.100	55.100	53.500	235.8	235.8	228.9
Skelp, grooved, per 100 pounds, Pittsburgh	2.000	2.100	2.100	143.9	151.1	151.1
Steel billets, per gross ton, Pittsburgh—						
Bessemer	37.000	37.000	36.700	143.5	143.5	142.3
Open hearth	38.000	38.000	37.100	145.6	145.6	142.2
Steel, merchant bars, per 100 pounds, Pittsburgh	2.100	2.100	2.100	135.6	135.6	135.6
Steel plates, tank, per pound, Pittsburgh	.020	.020	.020	135.1	135.1	135.1
Steel rails, per gross ton, Pittsburgh—						
Bessemer, standard	43.000	43.000	43.000	153.6	153.6	153.6
Open hearth, standard	43.000	43.000	43.000	143.3	143.3	143.3
Steel sheets, black, per pound, Pittsburgh	.036	.036	.035	162.6	162.1	157.5
Steel, structural shapes, per 100 pounds, Pittsburgh	2.100	2.050	2.100	139.0	135.7	139.0
Terneplate, 8 pounds I. C., per base box (220 pounds), Pittsburgh	11.500	11.500	11.500	165.8	165.8	165.8
Tin plate, domestic coke, per 100 pounds, Pittsburgh	5.500	5.500	5.500	154.6	154.6	154.6
Wire, per 100 pounds—						
Barbed, galvanized, Chicago	3.650	3.650	3.650	158.1	158.1	158.1
Plain, fence, annealed, Pittsburgh	2.750	2.800	2.790	181.8	185.1	184.5
Nonferrous metals						
Aluminum, per pound, New York	.270	.270	.270	114.2	114.2	114.2
Copper, ingot, electrolytic, per pound, refinery	.148	.145	.140	94.0	92.2	89.2
Copper, sheet, per pound, New York	.218	.218	.212	102.6	102.6	100.1
Copper wire, bare, per pound, mill	.173	.173	.167	103.3	103.6	100.1
Lead, pig, per pound, New York	.104	.095	.088	235.5	215.5	200.5
Lead pipe, per 100 pounds, New York	11.612	11.189	10.309	228.5	220.2	202.9
Quicksilver, per pound, New York	1.088	1.050	1.085	192.6	185.8	192.0
Silver, bar, fine, per ounce, New York	.688	.689	.682	112.4	112.4	111.3
Tin, pig, per pound, New York	.582	.570	.535	129.7	127.0	119.1
Zinc, sheet, per 100 pounds, factory	10.120	9.840	9.554	139.7	135.8	131.9
Zinc, slab, per pound, New York	.081	.078	.076	139.6	134.5	130.5
BUILDING MATERIALS						
Lumber				179.3	182.8	179.8
Douglas fir, per 1,000 feet, mill—				190.3	197.5	192.9
No. 1, common boards	19.500	18.500	18.500	211.8	200.9	200.9
No. 2 and better, drop siding	36.000	36.000	36.000	207.7	207.7	207.7
Gum, sap, firsts and seconds, per 1,000 feet, St. Louis	55.500	55.500	52.300	268.3	268.3	252.8
Hemlock, northern, No. 1, per 1,000 feet, Chicago	35.500	35.500	35.500	168.3	168.3	168.3
Maple, hard, No. 1, common, 4/4, per 1,000 feet, Chicago	65.500	65.500	65.000	217.3	217.3	215.7
Oak, white, plain, No. 1, common, 4/4, per 1,000 feet, Cincinnati	65.000	65.000	63.400	175.6	175.6	171.4
Pine, white, No. 2 barn, per 1,000 feet, Buffalo, N. Y.	55.000	55.000	55.000	188.2	188.2	188.2
Pine, yellow, flooring, long leaf, B and better, per 1,000 feet, New York	100.000	105.000	105.000	224.3	235.5	235.5
Pine, yellow, southern, per 1,000 feet, mill—						
Boards, No. 2, common, 1 x 8	23.670	23.860	23.480	185.9	187.4	184.4
Flooring, B and better	46.950	47.320	46.880	203.8	205.4	203.5
Timbers, square edge and sound	26.260	31.900	(¹)	179.4	218.0	—
Poplar, No. 1, common, 4/4, per 1,000 feet, Cincinnati	61.750	61.000	54.200	186.9	184.7	164.1
Spruce, eastern, random, per 1,000 feet, Boston	34.875	34.500	34.600	160.9	159.2	159.6
Lath, yellow pine, No. 1, per 1,000, mill	4.040	4.110	4.130	132.9	135.3	135.8
Shingles—						
Cypress, 16 inches long, per 1,000, mill	6.000	6.000	6.000	169.4	169.4	169.4
Red cedar, 16 inches long, per 1,000, mill	2.600	2.580	2.600	132.2	131.2	132.2

¹ Not included in weighted index.² Quotation not received.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH 1925—Continued

Commodity	Average prices			Index numbers (1913=100)		
	Jan., 1925	Feb., 1925	Mar., 1925	Jan., 1925	Feb., 1925	Mar., 1925
BUILDING MATERIALS—Continued						
Brick, common building, per 1,000				208.1	208.5	208.4
Simple average of 82 yard prices	\$14.136	\$14.165	\$14.128	208.2	208.6	208.0
Run of kiln, f. o. b. plant, Chicago ¹	8.450	8.520	8.510	171.1	172.5	172.3
Structural steel				139.1	135.7	139.1
Other building materials				169.6	169.6	167.2
Cement, Portland, per barrel, f. o. b. plant—						
Simple average of 6 plant prices in Pennsylvania, Indiana, Minnesota, Texas, and California	1.797	1.800	1.800	173.0	173.3	173.3
Buffington, Ind.	1.735	1.750	1.750	171.6	173.1	173.1
Northampton, Pa.	1.750	1.750	1.750	196.6	196.6	196.6
Crushed stone, 1½-inch, per cubic yard, New York	1.750	1.750	1.750	194.4	194.4	194.4
Gravel, per ton, f. o. b. pit, simple average of 28 plant prices	.994	.995	.972	201.0	201.4	196.7
Hollow tile, building, per block, Chicago	.060	.060	.060	93.8	93.8	93.8
Lime, common, lump, per ton, f. o. b. plant, simple average of 15 plant prices	9.462	9.433	9.386	229.2	228.7	227.4
Roofing, prepared, per square, f. o. b. factory ² —						
Medium weight	1.643	1.653	1.662	(1)	(1)	(1)
Shingles, individual	5.083	5.182	5.182	(1)	(1)	(1)
Shingles, strip	5.033	5.088	5.074	(1)	(1)	(1)
Slate, surfaced	1.888	1.925	1.934	(1)	(1)	(1)
Sand, building, per ton, f. o. b. pit, simple average of 31 plant prices	.659	.665	.651	172.9	174.5	170.9
Slate, roofing, per 100 square feet, f. o. b. quarry	12.000	12.000	12.000	259.5	259.5	259.5
Glass, plate—						
3 to 5 square feet, per square foot, New York	.430	.430	.430	181.7	181.7	181.7
5 to 10 square feet, per square foot, New York	.605	.605	.605	190.1	190.1	190.1
Glass, window, f. o. b. works—						
Single A, per 50 square feet	3.420	3.420	3.420	150.4	150.4	150.4
Single B, per 50 square feet	3.249	3.249	3.249	146.3	146.3	146.3
Linseed oil, per gallon, New York	1.162	1.163	1.113	251.5	251.6	240.7
Putty, commercial, per pound, New York	.040	.040	.040	150.9	150.9	150.9
Rosin, common to good (B), per barrel, New York	8.238	8.275	8.090	171.0	171.8	167.9
Turpentine, southern, barrels, per gallon, New York	.929	.938	.918	217.1	219.1	214.5
White lead, American, in oil, per pound, New York	.165	.163	.160	243.3	240.4	236.7
Zinc oxide (white zinc), per pound, New York	.070	.070	.070	130.1	130.1	130.1
Pipe, cast iron. (See Metals and metal products.)						
Copper, sheet. (See Metals and metal products.)						
Copper wire. (See Metals and metal products.)						
Lead pipe. (See Metals and metal products.)						
Nails. (See Metals and metal products.)						
Reinforcing bars. (See Metals and metal products.)						
Roofing tin (ternplate). (See Metals and metal products.)						
Zinc, sheet. (See Metals and metal products.)						
CHEMICALS AND DRUGS				135.2	134.5	134.2
Chemicals				128.2	126.8	126.3
Acids, per pound, New York—						
Acetic, 28 per cent	.031	.031	.031	160.8	160.8	160.8
Muriatic, 20°	.009	.009	.009	69.2	69.2	69.2
Nitric, 42°	.058	.058	.058	117.8	117.8	117.8
Salicylic, U. S. P., per gallon, New York	.350	.350	.350	123.5	123.5	123.5
Stearic, triple pressed	.161	.163	.167	121.7	123.1	126.0
Sulphuric, 66°	.007	.007	.007	70.0	70.0	70.0
Alcohol, per gallon, New York—						
Denatured, No. 5, 188 proof	.600	.594	.575	164.0	162.3	157.2
Wood, refined, 95 per cent	.680	.680	.680	142.2	142.2	142.2
Alum, lump, per pound, New York	.035	.035	.035	200.0	200.0	200.0
Ammonia, anhydrous, per pound, New York	.300	.300	.300	120.0	120.0	120.0
Benzol, pure, per gallon, f. o. b. works	.244	.233	.240	89.5	85.3	88.1
Bleaching powder, per 100 pounds, New York	1.900	1.900	1.900	161.0	161.0	161.0
Borax, crystals and granulated, per pound, New York	.050	.050	.050	133.3	133.3	133.3
Coal-tar colors—						
Black, direct, per pound, New York	.350	.350	.350	109.4	109.4	109.4
Brown, sulphur, per pound, New York	.200	.200	.200	90.9	90.9	90.9
Indigo, 20 per cent, per pound, New York	.203	.178	.175	112.8	98.6	97.2
Copper sulphate, 99 per cent crystals, per pound, New York	.048	.048	.048	92.7	92.7	92.7
Copra, South Sea. (See Foods.)						
Creosote oil, grade I, per gallon, f. o. b. works	.140	.140	.140	(1)	(1)	(1)

¹ No 1913 base price.² Not included in weighted index.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1925—Continued

Commodity	Average prices			Index numbers (1913=100)		
	Jan., 1925	Feb., 1925	Mar., 1925	Jan., 1925	Feb., 1925	Mar., 1925
CHEMICALS AND DRUGS—Continued						
Chemicals—Continued.						
Formaldehyde, per pound, New York	\$0.090	\$0.090	\$0.090	106.7	106.7	106.7
Oil, vegetable—						
Coconut, crude. (See Foods.)						
Corn, crude. (See Foods.)						
Palm kernel, crude, per pound, New York	.103	.101	.099	102.0	99.6	98.4
Soya bean, crude. (See Foods.)						
Potash, caustic, 88-92 per cent, per pound, New York	.073	.076	.076	203.4	214.1	214.1
Sal soda, per 100 pounds, New York	1.100	1.100	1.100	183.3	183.3	183.3
Soda ash, 58 per cent, light, per 100 pounds, New York	2.290	2.290	2.290	392.6	392.6	392.6
Soda, bicarbonate, American, per pound, f. o. b. works	.018	.018	.018	175.0	175.0	175.0
Soda, caustic, 76 per cent, solid, per pound, New York	.038	.038	.038	257.5	257.5	257.5
Soda, silicate of, 42°, per 100 pounds, New York	.800	.800	.800	125.8	125.8	125.8
Sulphur, crude, per gross ton, New York	14.000	14.000	14.000	63.6	63.6	63.6
Tallow, inedible, packers' prime, per pound, Chicago	.104	.094	.098	146.8	132.7	139.0
Fertilizer materials				105.5	106.0	106.8
Acid phosphate, 16 per cent basis, bulk, per ton, New York	9.000	9.000	9.000	116.9	116.9	116.9
Ammonia, sulphate, double bags, per 100 pounds, New York	3.075	3.075	3.075	98.5	98.5	98.5
Ground bone, steamed, per ton, Chicago	20.000	20.000	20.000	99.4	99.4	99.4
Muriate of potash, 80-85 per cent, K. C. L. bags, per ton, New York	34.550	34.550	34.550	90.7	90.7	90.7
Phosphate rock, 68 per cent, per ton, f. o. b. mines	2.100	2.100	2.100	61.6	61.6	61.6
Soda, nitrate, 95 per cent, per 100 pounds, New York	2.612	2.661	2.674	105.8	107.8	108.3
Tankage, 9 and 20 per cent, crushed, per ton, f. o. b. Chicago	29.900	29.900	31.700	128.0	128.0	135.7
Drugs and pharmaceuticals				180.4	180.3	179.8
Acid, citric, domestic, crystals, per pound, New York	.460	.460	.458	105.7	105.7	105.1
Acid, tartaric, crystals, U. S. P., per pound, New York	.290	.290	.290	95.1	95.1	95.1
Alcohol, grain, 188 proof, U. S. P., per gallon, New York	4.880	4.874	4.855	195.3	195.0	194.3
Cream of tartar, powdered, per pound, New York	.213	.213	.213	89.3	89.3	89.3
Epsom salts, U. S. P., in barrels, per 100 pounds, New York	2.500	2.500	2.500	227.3	227.3	227.3
Glycerin, refined, per pound, New York	.190	.190	.190	96.4	96.4	96.4
Opium, natural, U. S. P., per pound, New York	12.000	12.000	12.000	199.4	199.4	199.4
Peroxide of hydrogen, 4-ounce bottles, per gross, New York	8.000	8.000	8.000	200.0	200.0	200.0
Phenol, U. S. P. (carbolic acid), per pound, New York	.230	.230	.230	209.4	209.4	209.4
Quinine, sulphate, manufacturers' quotations, per ounce, New York	.500	.500	.500	227.7	227.7	227.7
HOUSE-FURNISHING GOODS				172.6	172.5	170.1
Furniture				153.5	153.5	150.2
Bedroom—						
Bed, combination, per bed, factory	32.000	32.000	32.000	142.2	142.2	142.2
Chair, all gum, cane seat, per chair, factory	4.500	4.500	4.000	200.0	200.0	177.8
Chiffonette, combination, per chiffonette, factory	36.000	36.000	34.000	110.8	110.8	104.6
Dresser, combination, per dresser, factory	49.000	49.000	48.000	136.1	136.1	133.3
Rocker, quartered oak, per chair, Chicago	4.655	4.655	4.655	227.2	227.2	227.2
Set, three pieces, per set, Chicago	31.115	31.115	31.115	163.9	163.9	163.9
Dining room—						
Buffet, combination, per buffet, factory	50.000	50.000	48.000	116.3	116.3	111.6
Chair, all gum, leather slip seat, per six, factory	33.000	33.000	31.000	220.0	220.0	206.7
Table, extension, combination, per table, factory	30.000	30.000	30.000	162.2	162.2	162.2
Living room—						
Davenport, standard pattern, per davenport, factory	63.000	63.000	63.000	182.6	182.6	182.6
Table, library, combination, per table, factory	32.000	32.000	30.000	160.0	160.0	150.0
Kitchen—						
Chair, hardwood, per dozen, Chicago	17.640	17.640	17.640	276.9	276.9	276.9
Refrigerator, lift-top type, each, factory	17.010	17.010	17.010	164.7	164.7	164.7
Table, with drawer, per table, Chicago	4.263	4.263	4.263	300.0	300.0	300.0

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1925—Continued

Commodity	Average prices			Index numbers (1913=100)		
	Jan., 1925	Feb., 1925	Mar., 1925	Jan., 1925	Feb., 1925	Mar., 1925
HOUSE-FURNISHING GOODS—Continued						
Furnishings				235.1	234.9	235.3
Blankets, factory—						
Cotton, colored, 2 pounds to the pair, per pair	\$1.465	\$1.400	\$1.400	242.2	231.4	231.4
Wool, 4 to 5 pounds to the pair, per pound	1.416	1.416	1.416	185.0	185.0	185.0
Carpets, per yard, factory—						
Axminster, Bigelow	3.024	3.024	3.024	225.8	225.8	225.8
Brussels, Bigelow	3.168	3.168	3.168	245.2	245.2	245.2
Wilton, Bigelow	5.280	5.280	5.280	219.3	219.3	219.3
Cutlery—						
Carvers, 8-inch, per pair, factory	1.350	1.350	1.350	180.0	180.0	180.0
Knives and forks, per gross, factory	15.000	15.000	15.000	260.9	260.9	260.9
Pails, galvanized iron, 10-quart, per gross, factory	23.104	23.200	23.200	157.5	158.2	158.2
Sheeting, bleached, 10/4, factory—						
Pepperell, per yard	.467	.467	.475	195.2	195.2	198.4
Wamsutta, P. L., per yard	1.140	1.140	1.140	294.5	294.5	294.5
Tableware—						
Glass nappies, 4-inch, per dozen, factory	.200	.200	.200	181.8	181.8	181.8
Glass pitchers, 1/2-gallon, per dozen, factory	2.250	2.250	2.250	281.3	281.3	281.3
Glass tumblers, 1/2-pint, per dozen, factory	.200	.200	.200	166.7	166.7	166.7
Plates, white granite, 7-inch, per dozen, factory	.980	.980	.980	211.5	211.5	211.5
Teacups and saucers, white granite, per dozen, factory	1.260	1.260	1.260	221.0	221.0	221.0
Ticking, Amoskeag, A. C. A., 2.85 yards to the pound, per yard, factory	.260	.260	.260	193.2	193.2	193.2
Tubs, galvanized iron, No. 3, per dozen, factory	6.777	6.825	6.825	165.0	166.2	166.2
MISCELLANEOUS				127.1	124.5	125.4
Cattle feed				154.9	130.0	127.3
Bran, per ton, Minneapolis	30.125	24.531	23.400	164.0	133.6	127.4
Cottonseed meal, prime, per ton, New York	37.500	35.000	37.500	132.5	123.6	132.5
Linseed meal, per ton, New York	49.600	46.750	41.500	174.5	164.5	146.0
Mill feed, middlings, standard, per ton, Minneapolis	33.500	25.844	23.825	172.2	132.9	122.5
Leather				150.5	153.2	153.2
Calf, chrome, B grade, per square foot, Boston	.500	.500	.500	185.5	185.5	185.5
Glazed kid, black, top grade, per square foot, Boston	.700	.700	.700	279.6	279.6	279.6
Harness, California oak, No. 1, per pound, Chicago	.431	.441	.441	107.5	109.9	109.9
Side, black, chrome, B grade, per square foot, Boston	.310	.310	.310	121.2	121.2	121.2
Sole, per pound—						
Oak, in sides, middle weight, tannery run, Boston	.380	.380	.380	127.5	127.5	127.5
Oak, scoured backs, heavy, Boston	.500	.520	.520	114.4	115.9	115.9
Union, middle weight, New York	.453	.490	.490	112.8	122.1	122.1
Paper and pulp				165.0	158.1	157.7
Paper—						
Newsprint, roll, per pound, f. o. b. mill	.037	.037	.037	178.9	178.9	178.9
Wrapping, manila, No. 1, jute, per pound, New York	.102	.091	.091	208.2	187.1	187.1
Wood pulp, sulphite, domestic, unbleached, per 100 pounds, New York	2.625	2.625	2.600	118.0	118.0	116.9
Other miscellaneous				104.4	104.9	107.1
Burlap, 10 1/2-ounce, 40-inch, per yard, New York	.096	.093	.096	119.3	115.3	119.7
Cylinder oil, gallon, refinery—						
Oklahoma, medium filtered stock	.164	.169	.183	(1)	(1)	(1)
Pennsylvania, 600, filtered, D	.320	.324	.325	(1)	(1)	(1)
Hemp, manila, fair, current shipment, per pound, New York	.182	.174	.188	196.1	187.6	202.6
Jute, raw, medium grade, per pound, New York	.089	.088	.095	132.3	130.8	142.0
Lubricating oil, paraffin, 903 gravity, per gallon, New York	.235	.248	.245	164.9	173.7	171.9
Rope, pure manila, best grade, per pound, New York	.250	.250	.280	170.4	170.4	190.9
Rubber, Para, island, fine, per pound, New York	.318	.307	.346	39.3	38.0	42.9
Sisal, Mexican, current shipment, per pound, New York	.086	.092	.092	199.3	213.4	213.7
Soap—						
Laundry, per 100 cakes, Cincinnati	4.125	4.125	4.125	133.8	133.8	133.8
Laundry, per 100 cakes, Philadelphia	5.243	5.243	4.911	148.6	148.6	139.2
Starch, laundry, bulk, per pound, New York	.060	.060	.060	163.0	163.0	163.0
Tobacco—						
Plug, per pound, New York	.696	.696	.696	179.0	179.0	179.0
Smoking, 1-ounce bags, per gross, New York	8.320	8.320	8.320	147.5	147.5	147.5
ALL COMMODITIES (404 price series)				160.0	160.6	161.0

¹ No 1913 base price.

Cost of Living, Retail Prices, and Building Costs in Reykjavik, Iceland¹

THE following table shows the trend in the price of each of the items of the cost of living in July, 1914, January and October, 1924, and January, 1925. The budget is that of a family of five persons having an expenditure, before the war, of 1,800 krónur.

COST OF BUDGET OF FAMILY OF FIVE IN REYKJAVIK, ICELAND, AT SPECIFIED PERIODS

[Krónur at par = 26.8 cents; exchange rate varies]

Item	Expenditures				Index numbers (July, 1914 = 100)		
	July, 1914	January, 1924	October, 1924	January, 1925	January, 1924	October, 1924	January, 1925
Food:	<i>Krónur</i>	<i>Krónur</i>	<i>Krónur</i>	<i>Krónur</i>			
Bread.....	132.86	354.90	382.20	418.60	267	288	315
Cereals.....	70.87	164.41	190.91	180.32	232	269	254
Vegetables and fruit, etc..	52.60	162.78	204.09	193.16	309	388	367
Sugar.....	67.00	189.65	178.70	134.35	263	267	201
Coffee, tea, etc.....	68.28	128.62	167.63	174.13	188	246	255
Butter and fats.....	147.41	361.90	399.22	414.04	245	271	281
Milk, cheese, and eggs.....	109.93	303.26	372.44	373.75	276	339	340
Meat and sausage.....	84.03	227.70	268.74	290.97	271	320	346
Fish.....	113.36	278.72	413.92	388.96	246	365	343
Total.....	846.34	2,171.94	2,577.85	2,568.28	257	305	303
Fuel and light.....	97.20	274.90	283.60	266.30	283	292	274
Laundry and clothes.....	272.99	-----	918.94	-----	-----	337	-----
Housing.....	300.00	-----	993.00	-----	-----	331	-----
Taxes.....	54.75	-----	278.00	-----	-----	505	-----
Miscellaneous.....	228.72	-----	720.47	-----	-----	315	-----
Grand total.....	1,800.00	-----	5,771.86	-----	-----	321	-----

Retail prices of certain commodities in Reykjavik for the same periods are given in the table below:

RETAIL PRICES OF VARIOUS COMMODITIES IN REYKJAVIK, ICELAND, JULY, 1914, JANUARY AND OCTOBER, 1924, AND JANUARY, 1925

[Auer., at par=0.268 cents; exchange rate varies]

Article	Unit	July, 1914	January, 1924	October, 1924	January, 1925	Per cent of increase, July, 1914, to January, 1925
		<i>Auer.</i>	<i>Auer.</i>	<i>Auer.</i>	<i>Auer.</i>	
Rye bread.....	3-kg. loaf.....	50	130	140	160	220
Wheat bread.....	500 gr. loaf.....	23	65	70	70	204
Sifted rye bread.....	do.....	14	45	50	50	257
Rye flour.....	Kg.....	19	48	53	57	200
Wheat flour.....	do.....	31	70	81	80	158
Wheat (No. 2).....	do.....	28	61	75	69	146
Barley flour.....	do.....	29	75	74	76	162
Rice.....	do.....	31	71	82	78	152
Sago.....	do.....	40	130	143	129	223
Farina.....	do.....	42	121	133	121	188
Rollod oats.....	do.....	32	73	82	80	150
Potato flour.....	do.....	36	90	117	105	192
Beans, whole.....	do.....	35	100	101	98	180
Peas, split.....	do.....	33	97	100	96	191
Potatoes.....	do.....	12	39	48	44	267
Rutabagas.....	do.....	10	34	41	43	330
Apples.....	do.....	56	172	200	197	252

¹ Iceland: Hagstofu, Hagtidindi, Reykjavik, December, 1924, and January, 1925.

RETAIL PRICES OF VARIOUS COMMODITIES IN REYKJAVIK, ICELAND, JULY, 1914,
JANUARY AND OCTOBER, 1924, AND JANUARY, 1925—Continued

Article	Unit	July, 1914	Janu- ary, 1924	Octo- ber, 1924	Janu- ary, 1925	Per cent of increase, July, 1914, to January, 1925
		<i>Av.</i>	<i>Av.</i>	<i>Av.</i>	<i>Av.</i>	
Raisins.....	Kg.	66	193	272	251	280
Prunes.....	do.	80	158	219	196	145
Apricots, dried.....	do.	186	484	551	506	172
Apples, dried.....	do.	141	321	460	448	218
Sugar, loaf.....	do.	53	150	149	114	115
Sugar, granulated.....	do.	51	139	131	95	86
Sugar, powdered.....	do.	49	145	120	90	84
Coffee, unroasted.....	do.	165	297	418	449	172
Coffee, roasted.....	do.	236	413	588	622	164
Tea.....	do.	471	979	1,180	1,126	139
Chocolate.....	do.	203	458	684	539	166
Cocoa.....	do.	265	339	380	363	37
Butter, Icelandic.....	do.	196	589	611	641	227
Margarine.....	do.	107	218	256	254	137
Tallow.....	do.	90	231	246	278	209
Milk, sweet.....	Liter	22	50	65	65	195
Cheese, whey.....	Kg.	50	194	246	234	368
Cheese, milk, whole.....	do.	110	397	483	468	325
Eggs.....	Each	8	36	35	38	375
Beef, roast, and steaks.....	Kg.	100	235	325	296	196
Beef, boiling.....	do.	85	186	228	257	202
Veal.....	do.	50	146	195	195	290
Mutton, fresh.....	do.		160	192	219	271
Mutton, salted.....	do.	67	160	210	203	203
Mutton, smoked.....	do.	100	224	280	293	193
Pork, salted.....	do.	170	500	530	567	234
Pork, smoked.....	do.	213	550	600	633	197
Fish:						
Haddock, fresh.....	do.	14	50	60	55	300
Cod, fresh.....	do.	14	40	55	55	303
Halibut, fresh.....	do.	37	110	119	120	324
Cod, salted, dried.....	do.	40	68	103	109	172
Other fish.....	do.	13	20	45	45	246
Soda.....	Kg.	12	37	41	40	233
Soap, laundry.....	do.	43	125	134	127	195
Soap, soft.....	do.	38	120	127	132	247
Soap, toilet.....	do.	46	256	300	312	578
Kerosene.....	Liter	18	36	46	42	133
Coal.....	/100 kg. (Skippund)	288 460	781 1,250	688 1,100	667 1,067	232

The table below shows building costs in Reykjavik in 1924 as compared with 1914:

BUILDING COSTS IN REYKJAVIK, ICELAND, 1914 AND 1924, BY ITEM
[Krónur at par=26.8 cents; exchange rate varies]

Item	1914	1924		Item	1914	1924	
		Amount	Index num- bers (1914= 100)			Amount	Index num- bers (1914= 100)
Labor:	<i>Krónur</i>	<i>Krónur</i>		Materials—Continued.	<i>Krónur</i>	<i>Krónur</i>	
Carpenters.....	866	3,897	450	Nails.....	75	223	297
Masons.....	319	1,477	463	Heating equipment.....	389	866	223
Painters.....	191	945	495	Sand and gravel.....	395	1,788	453
Laborers, general.....	735	2,900	395	Building paper.....	53	141	266
Materials:				Paint.....	242	462	191
Lumber.....	2,209	6,653	301	Glass.....	51	149	292
Doors and windows.....	329	1,010	307	Miscellaneous.....	317	712	223
Cement.....	775	1,829	236				
Galvanized iron.....	217	720	332	Total.....	7,288	24,144	331
Tin work.....	52	159	306				
Door and window fixtures.....	73	213	292				

WAGES AND HOURS OF LABOR

Wages and Hours of Labor in Metalliferous Mines

THE Bureau of Labor Statistics made a survey of wages and hours of labor in the principal metalliferous mines in the United States during the summer of 1924. The study included mines producing iron, copper, lead, zinc, gold, and silver and some minor metals as well.

Of the 137 mines from which figures were obtained, 117 were underground mines and 20 were open-pit or open-cut mines.

Nearly all of the mines covered were visited by agents of the bureau, who copied the data from the pay rolls. The figures are for one representative pay period at each mine. Pay periods were taken for 2 mines in June, 8 in July, 75 in August, 34 in September, and 18 in October.

Fourteen States were covered in this investigation. For the purposes of tabulation these States were divided into six districts, according to the kind of metals produced. The "western mixed ore district" includes Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, and Utah; the "Michigan copper district" is in the upper peninsula of Michigan; the "northern iron district" includes the iron regions of Michigan and Minnesota; the "Alabama iron district" is in the northern part of Alabama; the "southeastern Missouri lead district" is in the southeastern part of Missouri; and the "tri-State lead and zinc district" includes the northeast corner of Oklahoma, the southeast corner of Kansas, and the southwest corner of Missouri. The last-named is sometimes referred to as the Joplin district.

The "western mixed ore district" was so named because most of the mines in that district produce ore containing from two to five different metals with many variations in the combination. Only 13 of the mines covered in the district reported but one metal product.

Of the 20 open-pit mines, 3 are copper mines in the "western mixed ore district," 13 are iron mines in Minnesota, and 4 are iron mines in Alabama. In these open-pit or open-cut mines the ore is mined with steam or electric shovels.

The underground mines are of different types, designated as shaft, slope, or drift. A shaft mine is one in which the entrance is a vertical shaft. The slope mine is entered through a downward incline. The drift mine is one in which the ore vein is followed through a horizontal entrance. Some of the shaft mines are very deep, one being reported as having a depth of 8,700 feet.

In this survey a total of 38,196 employees were scheduled. Because of duplication, due to the fact that some employees worked at two or more occupations during the pay period scheduled, the table which follows covers 41,369. Each employee was tabulated under each occupation at which he worked. The number of duplications was 3,173.

The table which follows is divided into two sections, devoted to underground mines and open-pit mines, respectively. In the underground section, 46 of the principal occupations were selected and treated separately. Employees not included in these selected occu-

pations are tabulated as a separate group designated as "other employees." Of the 46 selected occupations, 23 are underground occupations, 11 are surface occupations, and 12 are occupations in which the men are employed either above or below ground as occasion requires. "Other employees" are both surface and underground workers.

In the open-pit mines 21 occupations were selected for separate tabulation, and "other employees" were treated as a separate group as in the tabulation of underground mines.

The table shows the number of establishments, the number of employees, average full-time hours per week, average earnings per hour, and average full-time earnings per week, for each district, in each of the selected occupations.

AVERAGE FULL-TIME HOURS, EARNINGS PER HOUR, AND FULL-TIME EARNINGS PER WEEK, IN METALLIFEROUS MINING IN THE UNITED STATES IN 1924

[Western mixed ore district includes Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, and Utah; northern iron district includes Michigan and Minnesota; tri-State lead and zinc district includes northeastern Oklahoma, southeastern Kansas, and southwestern Missouri]

Underground mines

Occupation and district	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
Blacksmiths (surface and underground):					
Western mixed ore.....	45	111	52.1	\$0.700	\$36.47
Michigan copper.....	6	40	54.0	.445	24.08
Northern iron.....	34	88	57.3	.529	30.31
Alabama iron.....	4	22	63.3	.554	35.07
Southeastern Missouri lead.....	3	8	49.0	.594	29.11
Tri-State lead and zinc.....	18	23	48.0	.615	29.52
Blacksmiths' helpers (surface and underground):					
Western mixed ore.....	37	108	52.0	.572	29.74
Michigan copper.....	6	69	54.0	.354	19.12
Northern iron.....	30	77	57.6	.426	24.54
Alabama iron.....	4	27	60.0	.367	22.02
Southeastern Missouri lead.....	3	4	48.0	.531	25.49
Tri-State lead and zinc.....	10	10	48.0	.513	24.62
Cagers (underground):					
Western mixed ore.....	24	99	52.3	.638	33.37
Northern iron.....	11	19	48.0	.567	27.22
Carpenters (surface and underground):					
Western mixed ore.....	39	103	53.1	.717	38.07
Michigan copper.....	6	71	53.9	.425	22.91
Northern iron.....	32	132	55.6	.532	29.58
Alabama iron.....	3	38	60.0	.531	31.86
Southeastern Missouri lead.....	1	1	48.0	.587	28.18
Tri-State lead and zinc.....	7	17	52.7	.691	36.42
Carpenters' helpers (surface and underground):					
Western mixed ore.....	21	36	52.7	.532	28.04
Michigan copper.....	4	27	54.0	.363	19.60
Northern iron.....	14	41	58.4	.419	24.47
Alabama iron.....	1	42	60.0	.375	22.50
Southeastern Missouri lead.....	1	1	48.0	.569	27.31
Tri-State lead and zinc.....	5	6	52.0	.453	23.56
Chute loaders (underground):					
Western mixed ore.....	12	114	54.5	.626	34.12
Michigan copper.....	4	304	48.0	.503	24.14
Northern iron.....	17	146	47.3	.540	25.54
Alabama iron.....	1	1	60.0	.300	18.00
Southeastern Missouri lead.....	3	31	48.0	.557	26.74
Compressormen (surface and underground):					
Western mixed ore.....	31	77	55.9	.662	37.01
Michigan copper.....	6	23	56.9	.446	25.38
Northern iron.....	9	23	63.0	.449	28.29
Alabama iron.....	3	11	73.1	.395	28.67
Southeastern Missouri lead.....	4	10	51.8	.554	28.70
Tri-State lead and zinc.....	6	10	84.0	.411	34.52
Drilling machine operators (company miners, underground):					
Western mixed ore.....	45	2,927	53.2	.617	32.82
Michigan copper.....	4	523	48.0	.557	26.74
Northern iron.....	28	1,103	47.4	.614	29.10
Alabama iron.....	4	310	60.0	.483	28.98
Southeastern Missouri lead.....	3	169	48.0	.577	27.70
Tri-State lead and zinc.....	22	295	48.0	.497	23.86

AVERAGE FULL-TIME HOURS, EARNINGS PER HOUR, AND FULL-TIME EARNINGS PER WEEK, IN METALLIFEROUS MINING IN THE UNITED STATES IN 1924—Contd.

Underground mines—Continued

Occupation and district	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
Drilling machine operators (contract miners, underground):					
Western mixed ore.....	24	1,628	51.5	\$0.778	\$40.07
Michigan copper.....	4	686	48.0	.676	32.45
Northern iron.....	28	3,528	47.4	.717	33.99
Alabama iron.....	1	6	60.0	.821	49.26
Southeastern Missouri lead ¹	4	68	48.0	.712	34.18
Drilling machine operators' helpers (underground):					
Western mixed ore.....	4	48	53.5	.679	36.33
Northern iron.....	3	8	46.5	.535	24.88
Alabama iron.....	3	169	60.0	.393	23.58
Southeastern Missouri lead.....	1	1	48.0	.569	27.31
Tri-State lead and zinc.....	22	333	48.0	.438	21.02
Drivers (surface):					
Western mixed ore.....	7	9	54.7	.568	31.07
Michigan copper.....	6	22	54.0	.358	19.33
Northern iron.....	25	50	59.0	.410	24.19
Alabama iron.....	2	19	60.0	.334	20.04
Tri-State lead and zinc.....	2	4	48.0	.609	29.23
Drivers, mule (underground):					
Western mixed ore.....	13	105	51.0	.547	27.90
Michigan copper.....	1	2	48.0	.400	19.20
Northern iron.....	3	10	47.7	.550	26.24
Alabama iron.....	2	76	60.0	.267	16.02
Southeastern Missouri lead.....	3	68	48.0	.624	29.95
Tri-State lead and zinc.....	16	88	48.0	.444	21.31
Dryhousemen (surface):					
Western mixed ore.....	26	60	53.3	.499	26.60
Michigan copper.....	6	33	55.3	.324	17.92
Northern iron.....	28	68	63.0	.394	24.82
Alabama iron.....	3	10	76.8	.270	20.74
Southeastern Missouri lead.....	4	8	59.0	.417	24.60
Dumpers (surface):					
Western mixed ore.....	9	40	54.6	.536	29.27
Northern iron.....	5	18	57.4	.445	25.54
Electricians (surface and underground):					
Western mixed ore.....	38	94	53.0	.733	38.85
Michigan copper.....	6	26	51.7	.465	24.04
Northern iron.....	28	53	56.4	.530	29.89
Alabama iron.....	4	18	64.0	.537	34.37
Southeastern Missouri lead.....	1	2	48.0	.575	27.60
Tri-State lead and zinc.....	1	1	56.0	.714	39.98
Electricians' helpers (surface and underground):					
Western mixed ore.....	23	53	52.4	.598	31.34
Michigan copper.....	6	9	54.0	.368	19.87
Northern iron.....	12	33	55.0	.440	24.20
Engineers, stationary (surface):					
Western mixed ore.....	8	26	55.1	.643	35.43
Michigan copper.....	1	8	61.5	.420	25.83
Northern iron.....	12	35	55.3	.472	26.10
Alabama iron.....	2	4	66.0	.314	20.72
Tri-State lead and zinc.....	4	6	70.0	.470	32.90
Firemen, stationary (surface):					
Western mixed ore.....	13	40	55.7	.584	32.53
Michigan copper.....	6	109	56.3	.426	23.98
Northern iron.....	22	91	61.3	.493	30.22
Alabama iron.....	4	30	75.6	.304	22.98
Tri-State lead and zinc.....	5	7	80.0	.329	26.32
Hoistmen (surface):					
Western mixed ore.....	34	136	54.4	.727	39.55
Michigan copper.....	6	92	53.5	.473	25.31
Northern iron.....	33	162	59.0	.484	28.56
Alabama iron.....	4	16	71.3	.502	35.79
Southeastern Missouri lead.....	4	16	55.0	.575	31.63
Tri-State lead and zinc.....	22	61	54.4	.530	28.83
Hoistmen (underground):					
Western mixed ore.....	30	117	53.7	.678	36.41
Michigan copper.....	1	4	48.0	.428	20.54
Northern iron.....	6	18	47.3	.514	24.31
Alabama iron.....	3	33	60.0	.386	23.16
Southeastern Missouri lead.....	1	2	48.0	.569	27.31
Tri-State lead and zinc.....	6	11	48.0	.496	23.81

¹ Not including 54 contract men who have from 1 to 4 helpers, and make a profit from the helpers' labor in addition to their own earnings. Their average income was \$0.902 per hour.

AVERAGE FULL-TIME HOURS, EARNINGS PER HOUR, AND FULL-TIME EARNINGS PER WEEK, IN METALLIFEROUS MINING IN THE UNITED STATES IN 1924—Contd.

Underground mines—Continued

Occupation and district	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
Laborers (underground):					
Michigan copper.....	3	157	48.0	\$0.474	\$22.75
Northern iron.....	12	52	47.3	.503	23.79
Alabama iron.....	3	250	60.0	.330	19.80
Southeastern Missouri lead.....	3	60	48.4	.573	27.73
Tri-State lead and zinc.....	20	206	48.0	.434	20.83
Loading machine operators (underground):					
Western mixed ore.....	2	3	53.3	.096	37.10
Michigan copper.....	2	35	48.0	.413	19.82
Northern iron.....	4	34	47.5	.660	31.78
Alabama iron.....	1	49	60.0	.510	30.60
Southeastern Missouri lead.....	4	53	48.0	.719	34.51
Tri-State lead and zinc.....	1	1	48.0	.563	27.02
Machinists (surface and underground):					
Western mixed ore.....	45	167	52.0	.701	36.45
Michigan copper.....	6	73	53.8	.478	25.72
Northern iron.....	28	86	57.6	.528	30.41
Alabama iron.....	4	32	60.0	.543	32.58
Southeastern Missouri lead.....	4	15	48.0	.601	28.85
Tri-State lead and zinc.....	2	2	52.0	.706	36.71
Machinists helpers (surface and underground):					
Western mixed ore.....	31	105	52.4	.557	29.19
Michigan copper.....	6	48	54.0	.377	20.36
Northern iron.....	19	49	58.0	.422	24.48
Alabama iron.....	4	15	60.0	.366	21.96
Southeastern Missouri lead.....	3	14	48.0	.569	27.31
Motormen (underground):					
Western mixed ore.....	33	380	53.8	.609	32.76
Michigan copper.....	5	67	48.0	.457	21.94
Northern iron.....	32	230	47.3	.558	26.39
Alabama iron.....	2	11	60.0	.444	26.64
Southeastern Missouri lead.....	4	57	48.0	.576	27.65
Tri-State lead and zinc.....	2	4	48.0	.556	26.69
Muckers (underground):					
Western mixed ore.....	41	2,137	53.0	.508	30.10
Michigan copper.....	6	319	48.0	.501	24.05
Northern iron.....	5	49	47.3	.531	25.12
Alabama iron.....	4	737	60.0	.429	25.74
Southeastern Missouri lead.....	4	430	48.0	.596	28.61
Tri-State lead and zinc.....	22	438	48.0	.690	33.55
Nippers (underground):					
Western mixed ore.....	36	172	53.2	.584	31.07
Michigan copper.....	4	85	48.0	.342	16.42
Northern iron.....	3	4	47.0	.569	26.74
Alabama iron.....	1	19	60.0	.380	22.80
Southeastern Missouri lead.....	1	1	48.0	.631	30.29
Tri-State lead and zinc.....	3	7	48.0	.455	21.84
Oilers (surface and underground):					
Western mixed ore.....	21	61	53.7	.562	30.18
Michigan copper.....	5	65	54.5	.333	18.15
Northern iron.....	11	17	57.4	.492	28.24
Alabama iron.....	2	3	60.0	.251	15.06
Tri-State lead and zinc.....	2	2	59.0	.403	23.78
Ore sorters (surface and underground):					
Western mixed ore.....	13	99	53.1	.556	29.52
Michigan copper.....	2	8	48.0	.412	19.78
Northern iron.....	9	34	52.8	.474	25.03
Pipemen (surface and underground):					
Western mixed ore.....	39	146	53.3	.635	33.85
Michigan copper.....	6	36	48.5	.481	23.33
Northern iron.....	34	110	51.0	.524	26.72
Alabama iron.....	4	17	60.0	.383	22.98
Southeastern Missouri lead.....	2	13	48.0	.570	27.36
Tri-State lead and zinc.....	4	6	48.0	.465	22.32
Powdermen (underground):					
Western mixed ore.....	25	80	53.2	.596	31.71
Michigan copper.....	1	1	48.0	.463	22.22
Northern iron.....	16	25	47.4	.553	26.21
Alabama iron.....	2	6	60.0	.376	22.56
Southeastern Missouri lead.....	3	3	48.0	.569	27.31
Pumpmen (underground):					
Western mixed ore.....	23	102	55.6	.655	36.42
Michigan copper.....	6	67	54.9	.429	23.55
Northern iron.....	32	126	56.3	.498	28.04
Alabama iron.....	4	20	65.6	.384	25.19
Southeastern Missouri lead.....	4	15	54.4	.534	29.05
Tri-State lead and zinc.....	4	5	69.6	.439	30.55

AVERAGE FULL-TIME HOURS, EARNINGS PER HOUR, AND FULL-TIME EARNINGS PER WEEK, IN METALLIFEROUS MINING IN THE UNITED STATES IN 1924—Contd.

Underground mines—Continued

Occupation and district	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
Roof trimmers (underground):					
Michigan copper.....	3	7	48.0	\$0.482	\$23.14
Alabama iron.....	2	63	60.0	.556	33.36
Southeastern Missouri lead.....	4	74	48.0	.575	27.60
Tri-State lead and zinc.....	17	32	48.0	.509	24.43
Skippers (underground):					
Western mixed ore.....	23	82	54.0	.637	34.40
Michigan copper.....	1	9	48.0	.459	22.03
Northern iron.....	29	127	47.7	.550	26.24
Alabama iron.....	1	11	66.0	.425	28.05
Stationmen (underground):					
Western mixed ore.....	6	66	54.5	.663	36.13
Michigan copper.....	4	70	48.0	.495	23.76
Northern iron.....	7	12	46.5	.538	25.02
Alabama iron.....	1	5	60.0	.425	25.50
Timber framers (surface):					
Western mixed ore.....	29	63	52.3	.641	33.52
Northern iron.....	25	75	58.3	.448	26.12
Timbermen (underground):					
Western mixed ore.....	45	1,279	53.7	.658	35.33
Michigan copper.....	6	410	48.0	.464	22.27
Northern iron.....	32	332	47.3	.578	27.34
Alabama iron.....	3	12	60.0	.421	25.26
Southeastern Missouri lead.....	1	3	48.0	.756	36.29
Tri-State lead and zinc.....	5	19	48.0	.500	24.00
Timbermen's helpers (underground):					
Western mixed ore.....	25	429	54.6	.605	33.03
Michigan copper.....	3	42	48.0	.406	19.49
Northern iron.....	11	169	46.8	.530	24.80
Alabama iron.....	3	68	60.0	.365	21.90
Tri-State lead and zinc.....	2	7	48.0	.437	20.98
Tool dressers (surface):					
Western mixed ore.....	34	62	53.4	.694	37.06
Michigan copper.....	6	33	54.0	.401	21.65
Northern iron.....	9	13	54.5	.515	28.07
Alabama iron.....	1	2	60.0	.620	37.20
Topmen (surface):					
Western mixed ore.....	43	520	52.5	.517	27.14
Michigan copper.....	6	181	54.2	.343	18.59
Northern iron.....	34	767	57.6	.418	24.08
Alabama iron.....	4	159	60.3	.282	17.00
Southeastern Missouri lead.....	4	9	48.0	.468	22.46
Tri-State lead and zinc.....	22	106	48.1	.421	20.25
Trackmen (underground):					
Western mixed ore.....	32	162	52.0	.596	30.99
Michigan copper.....	6	144	48.0	.460	22.08
Northern iron.....	21	71	47.2	.556	26.24
Alabama iron.....	4	31	60.0	.448	26.88
Southeastern Missouri lead.....	4	219	48.0	.569	27.31
Tri-State lead and zinc.....	19	40	48.0	.517	24.82
Trackmen's helpers (underground):					
Western mixed ore.....	11	52	54.2	.551	29.86
Michigan copper.....	2	25	48.0	.413	19.82
Northern iron.....	4	18	47.1	.515	24.26
Alabama iron.....	3	126	60.0	.351	21.06
Tri-State lead and zinc.....	7	27	48.0	.437	20.98
Trammers (underground):					
Western mixed ore.....	38	1,152	53.2	.557	29.63
Michigan copper.....	6	367	48.0	.551	26.45
Northern iron.....	29	385	47.6	.560	26.66
Alabama iron.....	1	3	60.0	.370	22.20
Southeastern Missouri lead.....	1	7	48.0	.569	27.31
Tri-State lead and zinc.....	22	114	48.0	.438	21.02
Trip riders (underground):					
Western mixed ore.....	21	126	53.2	.542	28.83
Michigan copper.....	3	36	48.0	.467	22.42
Northern iron.....	23	138	47.2	.552	26.05
Alabama iron.....	3	48	60.0	.345	20.70
Southeastern Missouri lead.....	3	43	48.0	.569	27.31
Tri-State lead and zinc.....	2	4	48.0	.469	22.51
Truck operators (surface):					
Western mixed ore.....	19	27	53.4	.610	32.57
Michigan copper.....	4	12	54.0	.383	20.68
Northern iron.....	15	32	56.6	.485	27.45
Alabama iron.....	2	2	60.0	.456	27.36

AVERAGE FULL-TIME HOURS, EARNINGS PER HOUR, AND FULL-TIME EARNINGS PER WEEK, IN METALLIFEROUS MINING IN THE UNITED STATES IN 1924—Contd.

Underground mines—Continued

Occupation and district	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
Watchmen (surface):					
Western mixed ore	36	104	57.7	\$0.526	\$30.35
Michigan copper	6	26	66.3	.352	23.34
Northern iron	28	50	76.8	.380	29.18
Alabama iron	2	8	79.3	.291	23.08
Tri-State lead and zinc	2	2	56.0	.366	20.50
Other employees (surface and underground):					
Western mixed ore	46	827	54.4	.673	36.61
Michigan copper	6	439	50.1	.497	24.90
Northern iron	35	563	53.0	.584	30.95
Alabama iron	4	116	61.3	.420	25.75
Southeastern Missouri lead	4	81	49.9	.592	29.54
Tri-State lead and zinc	22	113	49.0	.554	27.15

Open-pit mines

Blacksmiths:					
Western mixed ore	3	79	56.0	\$0.668	\$37.41
Minnesota iron	10	57	60.0	.567	34.02
Alabama iron	4	4	60.0	.401	24.06
Blacksmiths' helpers:					
Western mixed ore	3	82	56.0	.523	29.29
Minnesota iron	7	40	60.0	.458	27.48
Alabama iron	2	2	60.0	.285	17.10
Carpenters:					
Western mixed ore	3	26	56.0	.684	38.30
Minnesota iron	7	49	60.0	.530	31.80
Alabama iron	4	4	60.0	.315	18.90
Carpenters' helpers:					
Western mixed ore	3	35	56.0	.526	29.46
Minnesota iron	6	20	60.0	.437	26.22
Alabama iron	3	8	60.0	.310	18.60
Drilling machine operators:					
Western mixed ore	3	110	56.9	.614	34.94
Minnesota iron	12	117	60.0	.479	28.74
Alabama iron	2	2	60.0	.460	27.60
Drillers' helpers:					
Western mixed ore	3	99	57.1	.545	31.12
Minnesota iron	7	45	60.0	.438	26.28
Alabama iron	2	2	60.0	.281	16.81
Dumpmen:					
Western mixed ore	2	85	56.0	.330	18.98
Minnesota iron	9	106	60.0	.422	25.32
Alabama iron	1	1	60.0	.280	16.80
Laborers:					
Western mixed ore	3	179	56.0	.369	20.66
Minnesota iron	10	96	60.0	.429	25.74
Alabama iron	4	97	60.0	.245	14.70
Locomotive engineers:					
Western mixed ore	3	139	56.0	.685	38.36
Minnesota iron	13	162	60.0	.696	41.76
Alabama iron	4	18	60.0	.414	24.84
Locomotive firemen:					
Western mixed ore	3	175	56.0	.531	29.74
Minnesota iron	11	213	60.8	.524	31.86
Alabama iron	4	18	60.0	.260	15.60
Machinists:					
Western mixed ore	3	109	56.0	.660	36.96
Minnesota iron	10	79	60.0	.536	32.16
Alabama iron	4	4	60.0	.399	23.94
Machinists' helpers:					
Western mixed ore	3	184	57.1	.515	29.41
Minnesota iron	3	40	60.0	.455	27.30
Alabama iron	3	7	60.0	.337	20.22
Pitmen:					
Western mixed ore	3	232	56.0	.386	21.62
Minnesota iron	13	315	60.0	.469	28.14
Alabama iron	4	26	60.0	.253	15.18
Shot firers:					
Western mixed ore	2	28	59.5	.458	27.25
Minnesota iron	10	26	60.0	.494	29.64
Shovel engineers:					
Western mixed ore	3	69	56.0	.901	50.46
Minnesota iron	13	75	60.0	.997	59.82
Alabama iron	4	13	60.0	.546	32.76
Shovel firemen:					
Western mixed ore	3	104	56.0	.526	29.46
Minnesota iron	13	112	64.1	.514	32.95
Alabama iron	4	15	60.0	.275	16.50

AVERAGE FULL-TIME HOURS, EARNINGS PER HOUR, AND FULL-TIME EARNINGS PER WEEK, IN METALLIFEROUS MINING IN THE UNITED STATES IN 1924—Contd.

Open-pit mines—Continued

Occupation and district	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
Shovel cranemen:					
Western mixed ore.....	3	76	56.0	\$0.673	\$37.69
Minnesota iron.....	13	64	60.0	.701	42.06
Alabama iron.....	4	10	60.0	.390	23.40
Switchmen:					
Western mixed ore.....	3	128	56.0	.471	26.38
Minnesota iron.....	10	81	60.0	.424	25.44
Alabama iron.....	2	7	60.0	.255	15.30
Trackmen:					
Western mixed ore.....	3	891	56.0	.376	21.06
Minnesota iron.....	13	759	60.0	.419	25.14
Alabama iron.....	4	36	60.0	.250	15.00
Trip riders:					
Western mixed ore.....	2	153	56.0	.544	30.46
Minnesota iron.....	13	179	60.0	.481	28.86
Watchmen:					
Western mixed ore.....	3	104	58.6	.471	27.60
Minnesota iron.....	10	34	76.8	.449	34.48
Alabama iron.....	4	10	72.8	.249	18.13
Other employees:					
Western mixed ore.....	3	352	57.2	.536	30.66
Minnesota iron.....	13	355	60.4	.535	32.31
Alabama iron.....	4	69	60.0	.293	17.58

Wages of Seamen, January 1, 1924

THE following table taken from a recent report¹ of the United States Bureau of Navigation shows the average monthly wages of American and foreign seamen as of January 1, 1924:

AVERAGE MONTHLY WAGES OF AMERICAN AND FOREIGN SEAMEN ON STEAM AND MOTOR CARGO VESSELS OF 5,000 GROSS TONS AND OVER,* JANUARY 1, 1924

Position	Average monthly wages of seamen on—							
	American vessels		British vessels	Danish vessels	Dutch vessels	French vessels	Norwegian vessels	Spanish vessels
	Pri- vately owned ships	U. S. Ship- ping Board						
Deck department:								
First mate.....	\$182	\$192	\$92-\$122	\$151	\$104-\$110	\$74	\$110-\$120	\$68-\$135
Second mate.....	159	168	71- 83	118	78- 84	71	92- 99	48- 97
Third mate.....	141	153	56- 61	66	50- 54	-----	66- 71	37- 53
Fourth mate.....	122	145	51	-----	-----	-----	-----	-----
Boatswain.....	74	75	51	52	46	-----	52	29- 39
Carpenter.....	78	80	56- 75	52	46	71	52	-----
Seaman, able-bodied.....	60	63	44	46	40	64	46	24- 29
Seaman, ordinary.....	45	48	23- 30	23	20	57	25	19- 23
Engineer department:								
Chief engineer.....	285	272	112- 161	182	140- 150	386	-----	125- 154
Second engineer.....	184	192	92- 122	131	96- 102	241	-----	68- 97
Third engineer.....	160	168	71- 83	96	68- 72	178	-----	48- 68
Fourth engineer.....	142	153	56- 61	76	46- 50	158	-----	-----
Fireman.....	63	65	46- 51	47	42	74	47	25- 29
Greaser.....	70	73	49- 51	52	46	74	-----	-----
Water tender.....	69	73	49	52	-----	74	-----	29- 39
Coal passer or wiper.....	54	58	26- 44	32	34	64	27	23- 27
Steward department:								
Chief steward.....	127	129	66- 75	90	30	106	-----	29- 39
Second steward.....	108	113	40- 56	-----	-----	87	-----	-----
Cook.....	108	111	61- 71	66	58	116	-----	30
Second cook.....	84	90	41- 46	32	-----	97	-----	-----
Mess steward.....	48	47	39- 40	-----	-----	77	-----	14
Mess boy.....	42	43	-----	12	12	-----	-----	10

* All wages, except American, are taken from consular reports. The wages on foreign vessels are stated in the United States equivalent of the foreign value taken at the normal rate. The two columns under some of the foreign flags represent the highest and lowest wages paid based upon size of vessel, length of service, and other conditions. Reports for Italian vessels have not been received.

¹United States, Department of Commerce, Bureau of Navigation, Merchant marine statistics, 1924. Washington, 1925. iv, 73 pp.

Average Weekly Earnings of Factory Employees in New York in February, 1925

THE following table, furnished by the Bureau of Statistics and Information of the New York State Department of Labor and based on reports from 1,648 factories employing more than half a million persons, shows the average weekly earnings of shop and all factory employees in New York City and in the entire State in February, 1925:

AVERAGE WEEKLY EARNINGS OF FACTORY EMPLOYEES IN NEW YORK IN FEBRUARY, 1925, BY INDUSTRY

Industry	All factory employees		Shop employees, whole State	
	Whole State	New York City	Men	Women
Stone, clay and glass products:				
Miscellaneous stone and mineral products.....	\$32.07	\$46.11	\$37.93	
Lime, cement and plaster.....	29.83	32.56	29.57	\$14.04
Brick, tile and pottery.....	24.69	27.55	26.03	14.83
Glass.....	27.68	30.82	30.30	14.01
Total.....	28.52	34.86	30.47	14.26
Metals, machinery and conveyances:				
Gold, silver and precious stones.....	30.20	32.81	33.09	19.14
Brass, copper, aluminum, etc.....	27.30	25.97	28.33	14.59
Pig iron and rolling mill products.....	33.50		34.03	20.38
Structural and architectural iron work.....	31.62	35.07	29.42	(1)
Sheet-metal work and hardware.....	28.30	25.92	30.96	16.17
Firearms, tools and cutlery.....	25.83	(1)	26.80	14.28
Cooking, heating and ventilating apparatus.....	34.12	30.89	34.19	(1)
Machinery (including electrical apparatus).....	30.06	27.28	30.52	18.93
Automobiles, carriages and airplanes.....	32.03	33.22	31.83	18.42
Cars, locomotives and railroad repair shops.....	32.48	32.10	32.44	22.76
Boat and ship building.....	28.46	27.91	27.99	
Instruments and appliances.....	25.99	23.91	28.14	16.15
Total.....	30.18	27.46	31.15	17.41
Wood manufactures:				
Sawmill and planing-mill products.....	27.60	29.44	27.36	13.75
Furniture and cabinetwork.....	28.11	31.65	28.72	14.67
Pianos, organs, and other musical instruments.....	29.28	30.62	30.87	16.63
Miscellaneous wood and allied products.....	24.89	23.02	26.70	14.78
Total.....	27.61	28.18	28.84	15.42
Furs, leather and rubber goods:				
Leather.....	24.35		25.46	14.53
Furs and fur goods.....	32.68	32.68	33.23	20.53
Boots and shoes.....	25.93	27.46	27.66	16.90
Miscellaneous leather and canvas goods.....	25.64	29.64	28.99	14.78
Rubber and gutta percha goods.....	24.66	24.29	25.32	16.49
Pearl, horn, bone, celluloid, hair, etc.....	23.27	24.59	25.85	15.52
Total.....	25.72	27.50	27.06	16.30
Chemicals, oils, paints, etc.:				
Drugs and chemicals.....	28.50	22.38	30.91	15.45
Paints, dyes and colors.....	27.33	27.94	27.82	15.35
Animal and mineral oil products.....	27.71	28.98	30.31	15.73
Miscellaneous chemical products.....	29.95	27.75	33.81	19.30
Total.....	28.51	27.26	31.39	17.56
Paper.....	28.25	(1)	27.85	14.87
Printing and paper goods:				
Paper boxes and tubes.....	24.33	25.80	27.45	16.11
Miscellaneous paper goods.....	26.23	27.60	28.68	16.00
Printing and bookmaking.....	36.15	38.35	40.42	19.03
Total.....	33.36	35.59	38.61	18.03
Textiles:				
Silk and silk goods.....	20.41	22.43	27.60	15.04
Wool manufactures.....	25.67	(1)	29.10	16.57
Cotton goods.....	19.89		21.91	14.59
Cotton and woolen hosiery and knit goods.....	19.05	(1)	26.69	16.46
Other textiles and allied products.....	23.25	24.26	26.42	16.93
Total.....	22.25	23.67	26.85	16.11

¹ Average weekly earnings not computed because number of employees is too small.

AVERAGE WEEKLY EARNINGS OF FACTORY EMPLOYEES IN NEW YORK IN
FEBRUARY, 1925, BY INDUSTRY—Continued

Industry	All factory employees		Shop employees, whole State	
	Whole State	New York City	Men	Women
Clothing, millinery, laundering, etc.:				
Men's clothing.....	\$28.46	\$32.99	\$33.66	\$16.76
Men's shirts and furnishings.....	18.79	26.15	28.69	14.97
Women's clothing.....	35.01	36.99	49.67	24.84
Women's underwear and furnishings.....	22.12	22.85	31.04	19.63
Women's headwear.....	29.83	29.83	35.98	22.82
Miscellaneous sewing.....	19.34	19.50	28.14	15.63
Laundering, cleaning, dyeing, etc.....	19.74	20.51	28.72	15.22
Total.....	26.16	30.21	35.05	18.09
Food, beverages and tobacco:				
Flour, feed and other cereal products.....	28.94	27.83	28.59	13.95
Fruit and vegetable canning and preserving.....	24.50	23.40	28.03	12.48
Groceries not elsewhere classified.....	28.28	28.36	29.96	16.03
Meat and dairy products.....	30.13	32.94	29.69	16.72
Bread and other bakery products.....	24.88	25.00	30.90	14.54
Confectionery and ice cream.....	21.18	21.25	24.98	13.43
Beverages.....	33.79	38.06	32.52	10.79
Cigars and other tobacco products.....	18.04	18.95	24.58	17.82
Total.....	24.89	24.62	29.32	15.67
Water, light and power.....	33.93	33.36	33.92	(¹)
Grand total.....	27.97	28.89	31.00	17.19

Average weekly earnings not computed because number of employees is too small.

Wages in Various Occupations in North Carolina, 1924

THE weekly wages paid in various occupations in North Carolina in 1924 are shown in the following table, the data in which were taken from the thirty-fourth report of the Department of Labor and Printing of North Carolina:

AVERAGE WEEKLY WAGES IN SPECIFIED OCCUPATIONS IN NORTH CAROLINA, 1924

Occupation	Weekly wages	Occupation	Weekly wages
Auto mechanics.....	\$30.00	Factory workers—Continued.	
Boatmen.....	35.00	Furniture factory—females.....	¹ \$2.31
Boys.....	33.00	Knitting mill—males.....	¹ 3.80
Blacksmiths.....	33.00	Knitting mill—females.....	¹ 2.46
Boat makers.....	43.00	Tobacco factory—males.....	¹ 3.19
Boat makers' helpers.....	29.00	Tobacco factory—females.....	¹ 2.13
Boatmen, freight.....	32.00	Farm help.....	10.00
Boatmen, freight.....	47.00	Firemen:	
Boatmen, freight.....	32.00	Freight.....	39.00
Boatmen, freight.....	30.00	Passenger.....	50.00
Boatmen, freight.....	20.00	Stationary.....	30.00
Boatmen, freight.....	37.00	Switch.....	38.00
Boatmen, freight.....	22.00	Gardeners.....	15.00
Boatmen, freight.....	19.00	Janitors.....	15.00
Boatmen, freight.....		Laborers.....	15.00
Boatmen, freight.....	43.00	Laborers, bridge.....	20.00
Boatmen, freight.....	45.00	Lumbermen.....	15.00
Boatmen, freight.....	30.00	Machinists.....	25.00
Boatmen, freight.....	44.00	Machinists, first class.....	43.00
Boatmen, freight.....	7.00	Machinists, second class.....	40.00
Boatmen, freight.....	45.00	Machinists' helpers.....	29.00
Boatmen, freight.....		Metal workers.....	30.00
Boatmen, freight.....	50.00	Motormen.....	30.00
Boatmen, freight.....	52.00	Musicians.....	35.00
Boatmen, freight.....	50.00	Painters.....	34.00
Boatmen, freight.....	40.00	Pipe fitters.....	60.00
Boatmen, freight.....	44.00	Plasterers.....	40.00
Boatmen, freight.....	47.00	Plumbers.....	48.00
Boatmen, freight.....		Printers.....	50.00
Boatmen, freight.....	1 3.60	Waiters.....	42.00
Boatmen, freight.....	1 2.27		10.50
Boatmen, freight.....	1 3.90		

per day.

Wages in Various Industries in Denmark, 1924

THE following table, published in Statistiske Efterretninger No. 5, 1925, gives average hourly wages in various occupations in Denmark for the first and third quarters of 1924. The wages given are based on data supplied to the Statistical Department of Denmark by the Danish Employers' Association.

AVERAGE HOURLY WAGES IN VARIOUS OCCUPATIONS IN DENMARK, FIRST AND THIRD QUARTERS OF 1924

[Øre at par=0.268 cent; exchange rate varies]

Industry and occupation	Copenhagen			Provincial towns		
	Number of workers, Sept. 30, 1924	Wages per hour		Number of workers, Sept. 30, 1924	Wages per hour	
		First quarter, 1924	Third quarter, 1924		First quarter, 1924	Third quarter, 1924
Food industry:		Øre	Øre		Øre	Øre
Bakers.....	924	176	180	98	154	161
Millers.....	68	161	165	212	128	137
Chocolate factory employees—						
Skilled.....	63	171	182	19	161	170
Unskilled.....	85	135	135	9	137	146
Women.....	636	84	87	82	70	74
Margarine factory employees—						
Unskilled.....	65	125	131	202	120	127
Women.....	40	67	70	172	67	71
Brewery workers—						
Unskilled.....	1,931	135	149	580	126	134
Women.....	920	97	106	672	82	88
Alcohol factory employees—						
Unskilled.....	35	127	130	254	128	135
Women.....	43	96	102	12	95	101
Sugar factory employees—						
Unskilled.....	408	155	155	1,284	117	124
Women.....	199	81	81	62	66	70
Miscellaneous—						
Unskilled.....	131	146	145	268	122	129
Women.....	121	88	96	350	92	99
Tobacco industry:						
Cigar makers.....	858	147	159	891	144	154
Unskilled workers.....	119	148	159	150	129	139
Women.....	2,273	106	113	1,492	89	95
Textile industry:						
Textile workers—						
Men.....	655	133	140	1,810	127	134
Women.....	1,752	96	103	2,573	84	89
Ropemakers—						
Skilled.....	8	121	126	27	123	129
Unskilled.....	32	116	121	28	114	120
Women.....	122	74	78	63	64	68
Trimming makers—						
Skilled.....	24	154	160	5	175	182
Women.....	17	84	86	4	88	91
Sailmakers.....	9	215	210	19	139	146
Clothing industry:						
Tailors.....	138	160	168	18	145	152
Garment workers, men.....	98	167	173	11	151	158
Garment workers, women.....	979	86	88	434	70	74
Cutters, clothing.....	38	191	193	3	147	151
Other clothing workers, women.....	42	96	99	9	71	75
Shoemakers.....	34	156	169	1	123	130
Shoe factory workers—						
Men.....	1,052	178	179	165	141	146
Women.....	809	102	104	78	74	77
Metal trades:						
Molders.....	467	209	207	505	176	181
Tinsmiths.....	164	193	194	104	159	164
Electricians.....	604	168	167	592	154	158
Electroplaters.....	262	161	160	96	147	151
Coppersmiths.....	71	210	213	50	188	193
Metal cutters.....	128	188	191	68	155	159
Ship carpenters.....	159	202	210	271	156	163

AVERAGE HOURLY WAGES IN VARIOUS OCCUPATIONS IN DENMARK FIRST, AND
THIRD QUARTERS OF 1924—Continued

Industry and occupation	Copenhagen			Provincial towns		
	Number of workers, Sept. 30, 1924	Wages per hour		Number of workers, Sept. 30, 1924	Wages per hour	
		First quarter, 1924	Third quarter, 1924		First quarter, 1924	Third quarter, 1924
Metal trades—Continued.		Øre	Øre		Øre	Øre
Smiths and machinists.....	6,365	189	190	5,675	156	159
Metal pressers.....	69	206	210	16	183	175
Braziers.....	133	174	173	50	152	153
Miscellaneous, skilled workers.....	76	195	193	95	161	156
Common laborers.....	4,066	147	148	3,959	130	131
Women.....	1,899	86	87	359	82	82
Chemical industry:						
Paint mixers.....	33	157	166	8	153	155
Oil mill laborers.....	534	140	146	783	138	150
Sulphuric acid factory laborers.....	91	155	164	318	148	147
Match factory workers—						
Laborers, men.....	80	157	157			
Women.....	166	84	90			
Miscellaneous—						
Laborers, men.....	981	135	145	252	123	147
Women.....	1,031	79	82	297	68	74
Paper and printing industry:						
Paper factory workers—						
Laborers, men.....	190	139	139	806	122	127
Women.....	46	90	90	255	76	82
Book printing, etc.—						
Typographers.....	1,526	203	205	914	190	193
Lithographers.....	138	193	197	75	163	171
Chemigraphers.....	92	176	185		165	
Unskilled laborers, book printing.....	142	156	159	56	149	155
Women, book printing.....	316	100	102	91	84	86
Unskilled lithographic workers.....	27	144	152	5	130	140
Bookbinders—						
Skilled.....	336	195	199	115	141	146
Women.....	425	103	106	38	75	75
Paper goods—						
Unskilled workers.....	58	129	134		121	
Women.....	250	85	88	10	75	90
Box factories, women.....	264	91	97	107	81	86
Trade and transport:						
Stock and warehouse laborers.....	1,027	125	133	2,087	116	123
Longshoremen.....		210	229		206	207
Women.....	104	82	90	119	90	90
Leather tanners:						
Skilled.....	157	203	216	78	172	181
Unskilled.....	238	165	187	204	150	161
Building trades:						
Plumbers.....	339	193	206	154	139	147
Building joiners.....	1,005	188	193	1,200	140	146
Glaziers.....	111	158	161	82	127	132
Painters.....	1,342	190	200	463	134	147
Masons.....	1,301	237	269	1,972	149	170
Mason's helpers.....	945	177	208	1,978	119	133
Stucco workers.....	71	206	205	7	153	158
Carpenters.....	902	220	234	1,908	141	153
Carpenters' helpers.....	38	135	143	91	109	134
Linoleum layers.....	33	175	205			
Electric wiremen.....	48	203	236	14	234	181
Wood and furniture industry:						
Coopers.....	111	181	193	311	161	161
Brush makers.....	43	162	174	19	135	139
Carvers.....	17	182	170	36	142	144
Turners.....	29	154	163	70	142	147
Gilders.....	23	203	204	26	154	153
Coach makers.....	29	195	206	4	147	155
Wicker workers.....	22	133	131	3	136	170
Cabinetmakers.....	621	168	173	116	140	143
Machine carpenters.....	428	164	170	1,200	133	137
Woodworkers—						
Unskilled.....	363	131	136	590	113	116
Women.....	135	85	89	49	82	85
Piano makers.....	240	185	199	10	144	148
Clay, stone, and glass industry:						
Cement and concrete workers.....	1,883	176	192	2,529	115	125
Pavement layers.....	60	233	292	27	123	153
Stonecutters.....	112	193	210	326	125	138

AVERAGE HOURLY WAGES IN VARIOUS OCCUPATIONS IN DENMARK FIRST, AND THIRD QUARTERS OF 1924—Continued

Industry and occupation	Copenhagen			Provincial towns		
	Number of workers, Sept. 30, 1924	Wages per hour		Number of workers, Sept. 30, 1924	Wages per hour	
		First quarter, 1924	Third quarter, 1924		First quarter, 1924	Third quarter, 1924
Clay, stone, and glass industry—Contd.		<i>Øre</i>	<i>Øre</i>		<i>Øre</i>	<i>Øre</i>
Stonecutters' helpers.....	57	153	152	159	116	123
Gravel workers.....	3		150	255	109	130
Tile and brick makers.....	89	123	156	3,786	115	133
Cement factory workers.....				1,640	131	143
Ceramic workers—						
Skilled.....	191	171	184	50	133	142
Unskilled.....	316	137	146	90	108	113
Women.....	499	100	109	46	78	82
Terrazzo workers.....	47	163	174	9	124	131
Miscellaneous:						
Foremen.....	667	¹ 101.89	¹ 107.68	663	¹ 80.09	¹ 84.55
Firemen.....	381	¹ 72.03	¹ 73.90	752	¹ 66.11	¹ 68.51
Chauffeurs.....	776	¹ 66.55	¹ 69.80	461	¹ 58.53	¹ 61.55
Teamsters.....	1,355	¹ 63.40	¹ 66.85	993	¹ 56.73	¹ 58.79

¹ Kroner per week.Wages in France in October, 1924¹

A STUDY of the average wages paid in France to certain classes of workers has been made every five years since 1896 by the General Statistical Bureau, the last one having been made in 1921.² Wage studies at five-year intervals were considered fairly satisfactory before the war when the movement of wages was relatively slow, but at the present time, when considerable changes in wage rates are of frequent occurrence, it has been found necessary to make these studies oftener. The international conference of statisticians held at Geneva in October, 1923, decided that it was advisable that statistics of wages should be compiled in the different countries as frequently as possible and at the least once a year. The Minister of Labor of France therefore decided to make such a study annually, and requested the officers of trade councils and mayors who have cooperated in securing the information in the past to collect statistics similar to the previous studies, for their districts for October, 1924. The questionnaire covered the same classes of workers as in the former studies so that the figures for different periods are comparable.

Attention is called in the report to the fact that frequently a great variation is found in wages paid to workers in the same occupation and the same locality. As it was impossible to secure detailed information as to these variations, those compiling the information were asked to furnish an estimate of the average wages paid. While such estimates are not entirely exact, they have the advantage of having been secured under the same conditions as formerly and thus furnish uniform elements of comparison as well as a general idea of the movement of wages in France. The daily and hourly wages of males in 38 occupations and of females in 7 occupations are shown for all

¹ France. Bureau de la Statistique Générale de la France. Bulletin, January, 1925, pp. 168-192.² See MONTHLY LABOR REVIEW, December, 1921, pp. 92-98.

cities except Paris grouped together and for Paris and its environs. The averages thus established have been used to calculate the index numbers of hourly and daily wages in 1921 and 1924, 1911 being taken as the base.

For the group of cities other than Paris the average daily wages of the majority of male workers in October, 1924, ranged from 19 to 24 francs; weavers, however, received only 17.44 francs, and laborers, 16.42 francs. The daily wages of women averaged from 10 to 12 francs. In Paris the average daily wages of men were approximately 30 francs. Compared with 1911 the average hourly wages of men in cities other than Paris had increased 470 per cent and the daily wages 377 per cent.

The increases in wages amounted to more than 500 per cent for brick makers, quarrymen, weavers, rope makers and laborers—occupations in which the wages were relatively low before the war—while the smallest increases, those for metal turners, coppersmiths, wood turners, and printers, were in the neighborhood of 450 per cent. The hourly wages of women increased 500 per cent and the daily wages approximately 400 per cent. There were decided increases in the wages in all occupations in October, 1924, as compared with February, 1921, the increase amounting to an average of 16 per cent in all male occupations in the cities outside of Paris, and 20 per cent in women's occupations. It should be borne in mind, however, that the franc has depreciated greatly in value during this period and that the percentage increase in wages in 1924 over those paid in 1911 does not indicate necessarily an increase in the buying power of wages. The exchange rate of the French franc in United States currency in 1911 was approximately par, but in February, 1921, it had dropped to 7.17 cents and in October, 1924, it was only 5.23 cents.

The following table gives the daily and hourly wages in different occupations in 1911, 1921, and 1924 in Paris and in other cities and the index numbers for 1924, 1911 being taken as 100:

DAILY AND HOURLY WAGES IN FRENCH CITIES IN 1911, 1921 AND 1924, BY OCCUPATION

Paris

[Franc at par=19.3 cents; exchange rate varies]

Occupation	Average wages						Index numbers for 1924 (1911=100)	
	1911		February, 1921		October, 1924		Hourly rate	Daily rate
	Hourly rate	Daily rate	Hourly rate	Daily rate	Hourly rate	Daily rate		
Males	<i>Francs</i>	<i>Francs</i>	<i>Francs</i>	<i>Francs</i>	<i>Francs</i>	<i>Francs</i>		
Printers—compositors	0.80	7.20	3.45	27.60	4.15	33.20	519	461
Bookbinders	.60	6.00	3.20	25.60	3.70	29.60	617	493
Tanners	.65	6.50	3.15	25.20	3.50	28.00	538	431
Tailors	.75	7.50	3.50	28.00	4.00	32.00	533	427
Wood turners	.75	7.50	3.50	28.00	4.00	32.00	533	427
Cabinetmakers	.90	9.00	4.00	32.00	4.00	32.00	444	356
Pit sawyers			3.50	28.00	3.75	30.00		
Carpenters	1.00	9.00	3.50	28.00	3.75	30.00	375	333
Joiners	.80	8.00	3.75	30.00	3.75	30.00	469	375
Plumbers	.95	8.00	3.50	28.00	3.75	30.00	395	375

DAILY AND HOURLY WAGES IN FRENCH CITIES IN 1911, 1921, AND 1924, BY
OCCUPATION—Continued

Paris—Continued

Occupation	Average wages						Index numbers for 1924 (1911=100)	
	1911		February, 1921		October, 1924		Hourly rate	Daily rate
	Hourly rate	Daily rate	Hourly rate	Daily rate	Hourly rate	Daily rate		
<i>Males—Continued</i>	<i>Francs</i>	<i>Francs</i>	<i>Francs</i>	<i>Francs</i>	<i>Francs</i>	<i>Francs</i>		
Blacksmiths.....	1.00	10.00	4.00	32.00	4.50	36.00	450	360
Locksmiths.....	.90	8.00	3.25	26.00	3.75	30.00	417	375
Metal turners.....	.825	8.25	3.50	28.00	3.75	30.00	455	364
Watchmakers.....	.70	7.00	-----	-----	3.85	30.80	550	440
Quarrymen.....	.70	7.00	-----	-----	3.50	28.00	500	400
Stonecutters.....	1.00	9.00	-----	-----	4.00	32.00	400	356
Masons.....	.95	8.55	3.50	28.00	4.00	32.00	421	374
Navvies.....	.80	7.60	3.25	26.00	3.50	28.00	437	368
Tilers.....	.95	8.00	3.50	28.00	3.75	30.00	395	375
House painters.....	.85	7.25	3.50	28.00	3.75	30.00	441	414
Ornamental carvers.....	1.20	10.80	4.00	32.00	5.00	40.00	417	370
Brickmakers.....	-----	-----	3.25	26.00	3.00	24.00	-----	-----
Glaziers.....	.50	7.65	3.50	28.00	3.90	31.20	433	408

Cities other than Paris

	<i>Francs</i>	<i>Francs</i>	<i>Francs</i>	<i>Francs</i>	<i>Francs</i>	<i>Francs</i>		
<i>Males</i>								
Brewers.....	0.40	4.21	2.08	17.06	2.24	19.58	560	465
Printers—compositors.....	.50	4.94	2.31	18.54	2.75	22.40	550	453
Bookbinders.....	.43	4.67	2.25	17.86	2.63	21.58	612	462
Tanners.....	.40	4.09	2.10	17.02	2.29	19.03	572	465
Saddlers—harness makers.....	.42	4.26	2.07	16.83	2.41	20.40	574	479
Shoemakers.....	.38	3.95	1.98	16.30	2.23	19.06	587	482
Tailors.....	.44	4.55	2.20	18.02	2.63	22.42	598	493
Dyers—scourers.....	.42	4.13	2.09	16.80	2.34	19.62	557	475
Weavers.....	.35	3.32	1.85	14.33	2.11	17.44	603	525
Rope makers.....	.38	3.64	1.95	15.84	2.19	18.32	576	503
Wheelwrights.....	.43	4.44	2.28	18.77	2.56	21.86	596	492
Wood turners.....	.50	4.88	2.46	19.80	2.66	22.18	532	454
Coopers.....	.44	4.48	2.36	19.47	2.62	22.11	595	493
Cabinetmakers.....	.49	4.86	2.46	20.36	2.83	23.65	577	487
Upholsterers.....	.51	5.06	2.41	20.02	2.85	23.46	559	464
Pit sawyers.....	.45	4.57	2.34	19.56	2.51	21.02	558	460
Carpenters.....	.51	5.05	2.44	20.24	2.82	23.92	553	474
Joiners.....	.47	4.70	2.34	19.45	2.71	22.86	577	486
Coppersmiths.....	.53	5.40	2.61	21.33	2.80	23.32	528	432
Tinsmiths.....	.47	4.74	2.37	19.26	2.68	22.44	570	473
Plumbers.....	.49	4.92	2.36	19.36	2.75	23.10	561	469
Blacksmiths.....	.50	5.12	2.50	20.53	2.80	23.58	560	460
Farriers.....	.44	4.40	2.29	19.07	2.57	21.92	584	498
Stove makers.....	.50	5.04	2.42	19.50	2.64	22.14	528	439
Locksmiths.....	.46	4.65	2.31	19.18	2.68	22.62	582	486
Metal turners.....	.53	5.39	2.57	20.67	2.84	23.63	536	438
Watchmakers.....	.55	5.31	2.54	20.70	3.00	24.83	545	468
Quarrymen.....	.42	4.16	2.24	18.58	2.60	21.87	619	526
Stonecutters.....	.52	5.11	2.50	21.00	2.96	24.94	569	488
Masons.....	.49	4.80	2.39	19.72	2.80	23.74	571	494
Navvies.....	.39	3.82	2.05	17.22	2.31	19.66	592	515
Tilers.....	.52	5.05	2.45	20.14	2.82	23.92	542	474
House painters.....	.49	4.76	2.35	19.43	2.73	22.86	557	480
Ornamental carvers.....	.65	6.39	3.17	25.41	3.60	29.53	554	462
Brick makers.....	.41	4.17	2.35	19.95	2.57	22.18	627	532
Potters.....	.42	4.26	2.17	18.33	2.40	20.00	571	469
Glaziers.....	.49	4.72	2.37	19.52	2.64	22.20	539	470
Laborers.....	.33	3.26	1.67	14.01	1.94	16.42	588	504
Average, all male employees.....	.46	4.61	2.31	18.92	2.62	22.00	570	477
<i>Females</i>								
Ironers.....	.22	2.15	1.07	8.73	1.45	11.78	659	548
Dressmakers.....	.23	2.28	1.17	9.43	1.34	11.10	583	487
Seamstresses.....	.21	2.08	1.11	8.96	1.27	10.42	605	501
Waistcoat makers.....	.25	2.50	1.22	10.04	1.44	12.10	576	484
Lace makers.....	.22	2.13	1.30	10.49	1.34	11.10	609	521
Embroiderers.....	.25	2.44	1.18	9.16	1.43	11.73	572	481
Milliners.....	.25	2.48	1.17	9.24	1.37	11.33	548	457
Average, all female employees.....	.23	2.29	1.17	9.44	1.38	11.36	600	496

In addition to the above study the actual wages paid in various occupations which were represented in a locality by a sufficiently large number of workers were secured and are shown in the following table. Where it was possible to secure this information the wages paid in 1911 are also given.

DAILY WAGES PAID IN DIFFERENT LOCALITIES IN OCTOBER, 1924 AND 1911,
BY INDUSTRY AND OCCUPATION

[Franc at par=19.3 cents; exchange rate varies]

Industry and occupation	Locality	Daily wages	
		1911	October, 1924
		<i>Francs</i>	<i>Francs</i>
Food:			
Mustard makers	Dijon	4.00	16.00
Vermicelli makers, male	Valence	4.00	14.00
Vermicelli makers, female	do		8.00
Cracker makers, male	Calais	4.00	16.00
Cracker makers, female	Bédarieux	1.50	13.00
Chocolate factory workers, male	Tinchebray	3.25	18.00
Chocolate factory workers, female	do		8.00
Fish salters	Fécamp		16.00
Oil makers	do		19.00
Chemicals:			
Match makers, male	Aix		24.00
Match makers, female	do		20.00
Rubber and paper products:			
Rubber workers	Clermont-Ferrand	4.00	23.00
Paper and cardboard makers, male	Romilly		22.00
Paper makers, female	Angoulême	3.25	13.00
Cardboard makers, female	do	3.25	13.00
Cigarette-paper makers, female	do		11.00
Wall-paper makers	Perpignan	1.75	9.00
	Châlons-sur-Marne	5.00	20.00
Printing:			
Transfer makers	Remiremont		28.00
Stone engravers	do		28.00
Textiles:			
Spinners, linen	Armentières	3.50	15.70
Spinners, jute	do	3.50	17.10
Spinners, cotton, male	do	3.50	17.55
	Epinal	4.25	17.00
	Fraize	3.60	17.00
	Condé-sur-Noireau	3.10	15.50
Spinners, cotton, female	Epinal		14.00
	St.-Dié		12.00
	Condé-sur-Noireau	3.60	11.50
Spinners, male (not specified)	Haubourdin		28.00
	Fourmies	3.50	25.00
	Tourcoing	6.50	26.40
Piecers and doffers	Haubourdin		22.00
	Fourmies		20.00
	Tourcoing	4.00	22.40
Skin scourers	Mazamet	4.00	20.00
Unhairers, male	do	4.00	18.00
Unhairers, female	do		16.00
Silk spinners, male	Thizy		14.00
Silk spinners, female	do		11.50
Silk spinners	Anduze	1.60	8.00
Silk workers, female	St.-Chamond		16.00
	Montalieu-Vercieu		14.00
	Privas	1.40	9.00
	Perpignan		9.00
Artificial silk workers, male	Beauvais		18.00
Artificial silk workers, female	Valence		20.00
	do		10.40
	Elbeuf		12.00
Weavers, male (not specified)	Amiens	3.50	25.00
	Armentières	4.00	23.75
	Haubourdin	4.90	28.00
	Reims	3.25	12.00
	Fraize	2.20	16.40
	Mazamet	3.75	18.50
Weavers, female	Bohain		18.00
	Privas	2.40	10.00
	Bédarieux	2.75	16.00
	Cholet	2.00	14.00
Dyers, cotton goods	Roanne	3.50	20.00

**DAILY WAGES PAID IN DIFFERENT LOCALITIES IN OCTOBER, 1924 AND 1911,
BY INDUSTRY AND OCCUPATION—Continued**

Industry and occupation	Locality	Daily wages	
		1911	October, 1924
Textiles—Continued.		<i>Francs</i>	<i>Francs</i>
Warpers, male.....	Caudry.....		16.00
Warpers, female.....	St.-Etienne.....	2.50	13.00
Ribbon card winders, female.....	do.....	2.00	11.00
Winders, female.....	do.....	1.50	10.00
	Caudry.....		14.00
	Tourcoing.....		16.00
Tenterers, silk.....	Thizy.....		20.00
	Voiron.....		27.00
Embroidery weavers.....	Tarare.....		28.00
Bobbin-net makers.....	St.-Quentin.....	3.35	27.50
	Caudry.....		32.00
Bleachers, cloth.....	Merville.....		25.00
Finishers, male.....	Tarare.....	3.00	13.60
	Thizy.....		15.60
Finishers, female.....	Tarare.....		12.00
Hides and skins:			
Tawers, male.....	Chaumont.....	5.00	18.00
	Mazamet.....	4.25	18.50
	do.....		10.00
Tawers, female.....	Graulhet.....		12.00
	Grenoble.....	5.00	22.00
Fur dyers.....			
Boots and shoes; gloves:			
Shoe workers, male.....	Lyon.....		16.00
	Toulouse.....		20.50
	Cholet.....		10.80
	Boulogne.....		10.00
	Toulouse.....		11.50
	Cholet.....		8.00
Upper stitchers, female.....	Marseille.....		18.00
	Valence.....		12.00
Glove makers, male.....	Chaumont.....	6.00	22.50
	Grenoble.....	5.00	26.50
	Millau.....	4.25	27.00
	Niort.....	5.00	20.00
	Chaumont.....	2.00	9.00
	Millau.....		15.75
Wood working:			
Wooden-shoe makers.....	Roanne.....	3.75	20.00
Clog makers.....	Merville.....		25.00
	Aurillac.....	4.00	17.50
	Mantes.....		40.00
Musical-instrument makers.....			
Miscellaneous:			
Bead makers.....	Saumur.....		20.25
Comb makers, male.....	Oyonnax.....	5.00	30.00
	Tinchbray.....	3.25	18.00
	do.....	2.00	8.00
Comb makers, female.....	Beauvais.....		16.80
Button makers.....	do.....	5.00	20.00
Brush makers.....	Thiers.....		26.00
Knife handle finishers, horn.....	do.....	4.00	34.00
Knife handle shapers.....	do.....	5.00	20.00
Wooden-pipe makers.....	St.-Claude.....	10.00	
Metal works:			
Molders.....	Maubeuge.....	8.00	31.50
	Fumay.....	6.75	28.00
	St.-Dié.....		22.50
	Dôle.....		24.00
	Bourges.....		20.00
	Le Havre.....		29.25
	Maubeuge.....		32.40
	do.....		34.75
Electric welders.....	Châtellerault.....	4.95	16.00
Pattern makers.....	Thiers.....		35.00
Cutlery.....	do.....		22.00
Swagers.....	do.....	5.00	36.00
Metal stampers.....	do.....	4.50	38.00
Knife filers.....	do.....	4.50	30.00
Rough grinders.....	do.....		32.00
Knife polishers.....	do.....	2.50	16.00
Fitters (table knives).....			
Fitters (pocket knives).....			
Precious stones:			
Gem cutters.....	Lons-le-Saulnier.....		17.00
	St.-Claude.....		24.00
	do.....	10.00	24.00
Stonecutting:			
Marble workers.....	Cousoire.....	6.50	27.00
Sandstone cutters.....	Guéret.....		35.00

DAILY WAGES PAID IN DIFFERENT LOCALITIES IN OCTOBER, 1924 AND 1911,
BY INDUSTRY AND OCCUPATION—Continued

Industry and occupation	Locality	Daily wages	
		1911	October, 1924
		Francs	Francs
Lime, pottery, glass:	Boulogne		19.00
Cement workers	Remiremont		32.00
	St.-Yrieix		21.00
Lime burners	Albi	3.50	18.00
China painters	Quimper		18.00
Glass makers	Albi	8.00	28.00
	Clermont-Ferrand		34.00
Glass-bottle workers	Rive-de-Giers	8.00	30.00
Window-glass workers	do	8.00	50.00
Glass blowers	Valenciennes		48.00
Snappers	do		40.00
Gatherers	do		18.80
Drying-furnace tenders	do		32.80
Transportation:			
Dockers	Fécamp	5.00	22.50
	St.-Malo	5.00	22.50
	La Rochelle	6.50	22.00
	La Pallice		23.20
	Bayonne		21.00
	Cette	8.00	32.00

Wages and Cost of Living

A COMPARISON of wages and the cost of living as represented by the cost of board and lodging in the same localities in which data for wages were secured and the retail prices of 13 articles of prime necessity published every three months by the statistical bureau shows the following changes in cities having more than 10,000 inhabitants:

AVERAGE DAILY WAGES, COST OF BOARD AND LODGING, AND RETAIL PRICES OF 13 ARTICLES, AND INDEX NUMBERS THEREOF IN FRENCH CITIES IN 1911, 1921, AND 1924

[Franc at par=19.3 cents; exchange rate varies]

Item	1911	February, 1921	October, 1924	Index numbers (1911 = 100)	
				1921	1924
Daily wages:	Francs	Francs	Francs		
Men	4.61	18.92	22.00	410	477
Women	2.29	9.44	11.36	412	496
Cost of board and lodging per month	70.00	285.00	338.00	407	483
Retail prices of 13 articles				424	422

The index numbers show that the cost of board and lodging has increased since 1911 in approximately the same proportion as wages, while the cost of the 13 articles is considerably less. These two items are hardly comparable, however, as the cost of board and lodging of single workers may represent changes in the standard of living while the retail price index, relating as it does to articles of prime necessity alone, represents the influence of price changes upon the cost of a fixed standard of living.

Agricultural Wages

THE following table shows the average daily and annual wages of agricultural workers in the different Departments of France. These figures were collected by the prefects of the Departments in accordance with a provision of the law of December 15, 1922, on workmen's compensation in agriculture, which requires that these statistics shall be compiled each year.

AVERAGE WAGES¹ OF AGRICULTURAL WORKERS IN FRANCE, 1924

[Franc at par=19.3 cents; exchange rate varies]

Department	Men						Women			
	Farm laborers		Farm servants ²		Teamsters		Farm laborers		Farm servants	
	Per year	Per day	Per year	Per day	Per year	Per day	Per year	Per day	Per year	Per day
	Francs	Francs	Francs	Francs	Francs	Francs	Francs	Francs	Francs	Francs
Ain.....	3,600	12.85	4,000	13.33	4,000	13.33	2,400	8.57	2,500	8.33
Aisne.....	4,700	15.66	5,100	15.19	5,200	16.25	2,600	10.40	2,700	9.00
Allier.....	3,915	14.50	3,792	12.00	5,400	18.00	2,400	10.00	2,844	9.00
Alpes (Basses).....	3,430	14.00	3,960	13.00	4,685	16.00	2,020	9.00	2,210	7.00
Alpes (Hautes):										
Embrun et Gap.....	3,000	15.00	4,000	13.00	4,500	15.00	1,800	10.00	2,400	8.00
Briançon.....	2,160	12.00	3,100	10.00	---	---	1,350	9.00	2,250	7.50
Ardèche.....	3,600	13.85	3,800	12.66	4,000	13.33	2,500	9.61	---	---
Ardennes.....	4,800	16.00	4,800	16.00	6,000	18.00	3,000	10.00	3,000	10.00
Ariège.....	3,600	13.00	3,600	12.00	3,600	12.00	1,750	7.00	1,800	6.00
Aube:										
Champagne crayeuse.....	4,600	16.70	4,800	15.45	5,400	17.40	3,300	12.00	3,800	12.25
Champagne, humide.....	4,200	15.25	4,700	15.15	5,500	17.75	3,000	10.90	3,600	11.60
Nogentais.....	4,800	17.50	4,800	15.45	5,800	19.35	3,500	12.75	3,500	11.30
Pays d'Othe.....	4,500	16.40	4,500	14.50	5,400	18.00	3,200	11.65	3,500	11.30
Vignoble.....	4,500	16.40	4,300	13.85	5,800	19.33	3,200	11.65	3,300	10.65
Aude.....	3,100	12.90	3,950	11.00	4,200	11.65	1,500	6.50	2,220	6.16
Aveyron:										
Villefranche.....	4,250	17.00	4,500	13.75	4,900	15.00	---	---	3,800	11.50
St.-Affrique.....	3,840	16.00	4,800	14.50	5,100	15.50	3,000	12.50	3,800	11.50
Millau.....	4,000	20.00	4,700	14.25	5,300	16.00	2,400	12.00	3,500	10.50
Espalion.....	3,400	17.00	5,100	15.50	5,700	17.25	2,700	13.50	3,800	11.50
Rodez.....	4,200	17.50	5,100	15.50	5,800	17.50	1,500	12.50	3,900	11.75
Belfort.....	3,600	18.00	3,635	11.54	3,635	11.54	2,200	11.00	2,625	8.33
Bouches-du-Rhône.....	4,126	14.85	3,918	13.28	4,430	15.12	2,229	8.65	2,790	9.45
Calvados.....	4,350	14.50	4,360	12.45	---	---	3,300	11.00	3,825	10.48
Cantal.....	4,250	14.15	5,000	16.65	---	---	---	---	3,600	9.85
Charente.....	3,428	12.15	3,600	11.00	4,466	14.77	1,718	7.15	1,466	4.73
Cher.....	4,760	17.00	4,600	12.60	5,600	15.34	1,200	12.00	4,360	11.94
Corrèze.....	3,800	14.00	3,900	12.00	---	---	2,800	10.30	2,900	9.00
Côte-d'Or:										
Chatillon-on-Seine.....	4,500	17.00	4,500	15.00	4,860	18.00	3,120	12.00	3,000	10.00
Dijon.....	4,995	18.50	4,950	16.50	5,130	19.00	3,645	13.50	3,450	11.50
Beaune et Semur.....	5,265	19.50	5,250	17.50	5,265	19.50	4,770	14.50	4,750	12.50
Côtes-du-Nord.....	3,600	12.00	3,700	11.56	4,000	12.50	2,900	9.66	2,900	9.07
Creuse.....	3,500	15.00	5,000	17.00	5,000	17.00	2,300	10.00	3,250	10.00
Dordogne.....	3,000	10.00	3,000	10.00	3,400	10.13	2,000	6.50	2,000	6.50
Doubo.....	6,000	20.00	5,000	16.00	6,500	21.00	4,500	15.00	3,500	11.00
Drôme.....	4,300	15.00	4,200	14.00	4,200	14.00	3,300	11.00	3,000	10.00
Eure.....	4,800	16.00	4,480	14.00	5,440	17.00	3,250	13.00	3,600	10.00
Eure-et-Loir.....	4,925	16.40	4,520	12.90	5,250	15.60	3,875	12.90	4,050	11.60
Finistère:										
Brest-Morlaix.....	3,300	11.00	3,700	11.875	4,000	12.50	2,400	8.00	2,200	68.75
St.-Pol de Léon-Roscoff.....	4,200	14.00	3,800	12.25	---	---	1,200	12.00	2,300	7.40
Quimper, Chateaulin, Quimperlé.....	3,600	12.00	4,100	12.81	4,400	13.75	2,400	8.00	2,600	8.12
Gard.....	3,600	13.33	3,000	10.00	3,800	12.66	1,800	6.92	1,800	5.66
Garonne (Haute).....	2,600	10.83	3,200	10.66	3,800	12.66	1,640	6.83	2,400	8.00

¹ Including payments in kind.² Work under a contract—usually for a year.³ Vineyard laborers, 3,250 francs per year, 13 francs per day.⁴ Vineyard laborers, 1,500 francs per year, 7.25 francs per day.⁵ Foremen in charge of cattle.⁶ Head carters; other carters, 4,500 francs per year, 13.25 francs per day.

AVERAGE WAGES OF AGRICULTURAL WORKERS IN FRANCE, 1924—Continued

Department	Men						Women			
	Farm laborers		Farm servants		Teamsters		Farm laborers		Farm servants	
	Per year	Per day	Per year	Per day	Per year	Per day	Per year	Per day	Per year	Per day
	Francs	Francs	Francs	Francs	Francs	Francs	Francs	Francs	Francs	Francs
Gers.....	3,600	12.00	2,000	6.50	-----	-----	1,800	7.00	1,200	4.00
Gironde.....	4,500	15.00	4,800	16.00	4,800	16.00	2,550	10.20	-----	-----
Hérault.....	4,500	16.00	4,300	14.00	4,800	16.00	2,250	8.00	3,000	9.00
Ile-et-Vilaine:										
St.-Malô.....	-----	15.00	4,200	14.00	4,400	14.66	-----	12.00	3,300	11.00
Rennes-Fougères.....	-----	14.00	4,200	14.00	4,400	14.66	-----	11.00	3,300	11.00
Redon.....	-----	9.00	3,600	12.00	3,800	12.66	-----	7.00	2,800	9.33
Centre.....	-----	10.00	3,800	12.66	4,200	14.00	-----	8.00	3,000	10.00
Indre-et-Loire.....	3,920	14.00	4,500	14.00	4,500	14.00	2,520	9.00	2,800	9.00
Indre:										
Chateauroux, Issoudun.....	4,200	14.00	4,400	14.65	4,800	16.00	3,200	10.65	4,200	11.65
La Châtre-Le Blanc.....	4,200	14.00	3,200	10.65	4,400	14.65	3,200	10.65	3,100	9.45
Isère.....	4,100	16.00	4,500	14.00	4,800	17.00	3,000	10.00	2,880	9.00
Jura.....	3,400	15.00	3,400	9.34	-----	-----	2,200	10.00	2,200	6.02
Landes.....	3,200	10.70	3,000	10.00	4,300	14.00	1,930	6.40	1,720	6.00
Loir-et-Cher:										
Sologne.....	4,000	14.54	4,500	14.03	5,400	16.87	3,000	11.50	3,700	11.21
Beauce.....	5,100	17.00	4,800	15.00	6,300	19.68	3,500	12.50	4,200	12.75
Perche.....	4,600	16.14	4,700	14.68	6,000	18.75	3,300	12.00	4,000	12.50
Loire.....	4,500	16.00	5,000	15.60	5,000	15.60	1,440	12.00	3,830	11.60
Loire (Haute-).....	2,500	16.00	4,300	11.80	4,300	11.80	1,860	12.00	2,800	7.65
Loire-Inférieure:										
A ¹⁰	3,825	12.75	3,431	10.60	-----	-----	2,640	8.60	2,555	7.90
B ¹⁰	3,390	11.30	3,540	11.00	-----	-----	2,250	7.50	2,555	7.90
C ¹⁰	4,050	13.50	4,124	12.80	-----	-----	2,670	8.90	2,847	8.80
Loiret.....	7,400	24.66	7,000	19.17	7,000	19.17	3,940	17.90	6,000	16.43
Lot.....	4,000	13.50	4,350	12.80	-----	-----	3,000	10.50	3,000	8.50
Lot-et-Garonne.....	3,000	12.00	3,600	12.00	3,500	14.00	2,000	8.00	2,400	8.00
Lozère.....	3,000	15.00	4,000	12.50	4,000	12.50	2,000	10.00	3,000	9.40
Maine-et-Loire.....	4,800	16.00	4,800	13.33	4,800	13.33	3,200	10.66	3,200	8.88
Manche.....	3,600	12.00	3,300	9.16	4,200	11.66	3,000	10.00	3,000	8.33
Marne:										
Vine-growing region.....	5,200	18.95	-----	-----	5,000	16.65	3,800	12.65	-----	-----
Reims region.....	-----	-----	-----	-----	6,000	20.00	4,000	14.55	-----	-----
Other regions.....	4,800	16.00	-----	-----	5,700	19.00	-----	-----	-----	-----
Marne (Haute).....	3,420	12.80	4,000	13.80	4,850	19.40	2,300	9.30	2,500	8.20
Mayenne.....	3,600	12.00	3,800	11.15	4,200	12.35	2,400	8.00	2,900	8.50
Meurthe-et-Moselle.....	4,800	16.00	5,000	13.88	-----	-----	2,000	10.00	4,000	11.11
Meuse.....	4,800	16.00	4,950	15.00	5,775	17.50	3,300	11.00	3,300	10.00
Morbihan:										
Lorient et Pontivy.....	3,400	11.33	4,000	12.50	4,000	12.50	2,000	6.66	2,500	8.33
Vannes-Ploermel.....	3,800	12.66	4,100	12.81	4,100	12.81	2,000	6.66	2,600	8.12
Nièvre.....	4,800	16.00	5,000	13.70	5,910	16.20	2,550	8.50	4,000	10.95
Nord.....	4,800	16.00	5,400	15.00	5,400	18.00	3,080	11.00	3,600	10.00
Oise.....	4,800	16.00	5,120	16.00	116,000	1120.00	3,600	12.00	3,840	12.00
Orne.....	3,450	11.50	3,905	10.70	4,252	11.65	2,550	8.50	2,701	7.40
Pas-de-Calais:										
Arras.....	4,900	17.50	5,400	18.00	6,000	20.00	1,800	9.00	-----	-----
Béthune, north.....	4,640	16.00	5,000	16.65	5,500	18.30	1,600	8.00	-----	-----
Béthune, south.....	5,800	20.00	6,000	20.00	6,000	20.00	2,000	10.00	-----	-----
Boulogne et St. Omer.....	5,000	17.85	4,340	14.00	5,000	16.65	2,800	9.65	-----	-----
Montreuil et St. Pol.....	4,200	15.00	4,550	13.00	5,000	16.65	1,500	7.50	3,600	12.00
Puy-de-Dôme.....	4,500	18.00	4,500	15.00	4,800	16.00	3,000	13.00	3,000	10.00
Pyrénées (Basses):										
Pau, Bayonne, Oloron et										
Orthez.....	3,200	12.30	3,400	11.33	3,500	11.66	1,900	7.50	2,100	7.00
Mauléon.....	2,600	10.00	2,800	9.33	3,000	10.00	1,560	6.00	1,650	5.50
Pyrénées (Hautes).....	2,800	10.00	-----	-----	-----	-----	1,400	5.00	-----	-----
Pyrénées-Orientales.....	4,160	16.00	4,500	15.00	4,160	16.00	2,080	8.00	2,695	8.98
Rhone:										
Market gardening country.....	4,800	16.00	4,800	16.00	-----	-----	3,800	12.00	3,800	12.00
Vine-growing valleys and										
plains.....	4,200	14.00	4,200	14.00	4,800	16.00	3,200	10.00	3,200	10.00
Mountainous regions.....	3,600	12.00	3,600	12.00	-----	-----	2,400	8.00	2,400	8.00
Saône (Haute).....	4,800	16.00	4,800	16.00	4,800	16.00	3,600	12.00	3,600	12.00

⁷ Permanent workers; temporary workers, 3,000 francs per year, 10 francs per day.

⁸ Permanent workers; temporary workers, 1,500 francs per year, 6.50 francs per day.

⁹ Wood plantation laborers; men, 4,300 francs per year, 14 francs per day; women, 2,460 francs per year, 8 francs per day.

¹⁰ Different sections of the Department of Loire-Inférieure.

¹¹ Head carters; other carters, 5,100 francs per year, 17 francs per day.

AVERAGE WAGES OF AGRICULTURAL WORKERS IN FRANCE, 1924—Continued

Department	Men						Women			
	Farm laborers		Farm servants		Teamsters		Farm laborers		Farm servants	
	Per year	Per day	Per year	Per day	Per year	Per day	Per year	Per day	Per year	Per day
	Francs	Francs	Francs	Francs	Francs	Francs	Francs	Francs	Francs	Francs
Saône-et-Loire.....	4,350	15.00	3,915	13.50	4,495	15.50	2,730	10.50	2,340	9.00
Sarthe.....	3,000	12.00	3,960	11.00	4,200	11.66	2,500	10.00	3,120	8.66
Savoie.....	3,635	13.50	3,600	12.50	3,600	12.50	2,370	9.25	2,200	8.50
Savoie (Haute).....	5,040	18.00	5,928	19.00	5,700	19.00	3,500	12.50		
Seine.....	9,410	31.00			9,810	32.70				
Seine ¹²	6,000	20.00			7,500	25.00	4,500	15.00		
Seine-Inferieure.....	4,500	15.00	4,800	16.00	5,000	16.65	3,600	12.00	3,600	12.00
Seine-et-Marne.....	4,800	16.00	5,580	18.00	5,760	18.00	3,000	10.00	3,410	11.00
Seine-et-Oise.....	5,500	18.00	5,500	18.00	6,000	19.00	3,300	11.00		
Sèvres (Deux).....	4,950	16.50	5,400	17.50	5,400	17.50	3,460	10.50	3,800	11.50
Somme.....	4,500	15.75	4,000	12.50	5,400	16.50	2,500	10.00	2,500	8.00
Tarn.....	4,000	14.30	4,500	13.63	3,800	12.66	3,000	10.70	3,500	10.60
Tarn-et-Garonne.....	3,000	12.00	3,500	12.50	4,000	13.33	1,800	7.20	2,000	7.14
Var.....	3,600	15.00	3,900	13.00	4,500	15.00	1,320	6.00	1,800	6.00
Vaucluse.....	3,240	12.00	3,300	9.25	3,300	11.00	1,610	7.00		
Vendée:										
Insular.....	3,000	10.00					1,800	6.00		
Continental.....	3,900	13.00	4,200	13.10			2,000	8.00	2,900	9.00
Vienne.....	4,200	14.00	4,500	13.63	5,000	15.15	2,500	10.00	3,500	10.60
Vienne (Haute):										
Limoges.....	3,629	12.72	3,699	11.84	3,612	13.00	2,091	7.91	2,614	7.61
Bellac.....	2,872	10.65	3,197	9.75	4,007	14.00	1,668	6.03	1,874	6.01
Rochechouart.....	2,578	10.00	2,851	8.45	3,000	13.00	1,666	6.50	2,026	5.55
St.-Yrieix.....	2,975	11.31	2,625	8.16	3,300	10.38	1,555	6.49	1,662	5.20
Vosges.....	2,250	15.00	3,600	10.00	4,500	15.00	1,500	10.00	2,400	6.65
Yonne.....	4,200	15.00	4,000	12.50	4,800	14.50	2,800	10.00	3,200	10.00

¹² Without board and lodging.

Holidays, With Pay, for English Wage Earners

THE Ministry of Labor Gazette (London), in its issue for March, 1925, gives some data concerning the provisions for holidays with pay contained in English collective agreements in various industries. It is pointed out that large numbers of salaried clerks and office workers have such holidays as a matter of established custom and that a number of individual employers grant them to their workers without any agreement, but the data given here deal exclusively with wage earners working under collective agreements. A list of approximately 130 agreements is given, 25 of them being general and the remainder district agreements, which provide for length of the holidays with pay, and it is estimated that about a million and a half wage earners are covered by these. The agreements usually provide that the workers shall be paid for all legal holidays and for a specified period in addition, its length varying from 2 to 21 days. Generally the worker must serve for a period varying from 6 to 12 months before he can claim the holidays, and in some cases the holiday period depends upon the length of service. Sometimes it is provided that the holidays must be taken consecutively, or in the summer months, or other conditions may be attached.

Time workers are usually paid for these holidays at the full weekly rates, but for pieceworkers various methods of computing the pay-

ment are used. In some cases it is specified that they are to be paid time rates, but more often their payment is calculated on the basis of the average of their weekly earnings for three or six months previous to the holiday.

An interesting variation is also made by certain newspaper printing firms at Glasgow, who calculate the holiday payment on the average earnings of all pieceworkers and not on those of the individual workers in order to avoid hardship in the case of those whose earnings have been reduced owing to illness.

In some cases the employees themselves provide a part or all of the fund from which the holiday payments come.

A few of the agreements provide for a contribution in one form or another toward the payment for holidays. In the boot and shoe industry contributions are made to a holiday fund by the employer and the worker, the amount being 1s. 2d.¹ a week from the employer and the same from the worker in the case of adult men, with smaller amounts for women, youths, and girls. This fund provides for payment for Easter, Whitsun, August, and Christmas, or other customary local holidays. The contributions extend over 48 weeks in the year, and withdrawals are made by two installments at Easter and Whitsun and two larger installments at August and Christmas. Another example of a contributory system is found in an agreement covering type foundrymen in London who work 50 hours a week in 50 weeks of the year but receive payment for 48 hours only, the extra two hours per week accruing during the year toward holidays.

English Wage Rates, August, 1914, and December, 1924

THE Ministry of Labor Gazette (London), in its issue for February, 1925, publishes a study of comparative wage rates in August, 1914, and December, 1924, basing the comparison on standard or minimum rates of wages as fixed by collective agreements, arbitration awards, or minimum wage orders, or on minimum rates recognized by the unions concerned. That is, no attempt was made to collect data as to wages actually paid by individual employers, but the study was concerned only with rates which were recognized, at each period, as either minimum or standard.

It is important, however, to realize that the rates of wages actually paid to individual workpeople, or to particular sections of workpeople, may in a considerable proportion of cases, have been altered since 1914, independently of the general changes jointly agreed upon by employers' associations and trade-unions, or fixed by awards, orders, etc.; and that alterations in machinery, in methods of manufacture, in industrial organization, and in systems of remuneration of workpeople, may also, over a period of 10 years, have resulted in appreciable changes in the general level of wages in some industries.

Moreover, there are some industries and sections of industries in which there are no formally recognized minimum or standard rates, and for these no information is given. The data used, therefore, can not be regarded as "furnishing more than an approximate indication of the general levels of wage rates at the two dates," and the reader is warned to use it with caution.

¹ Shilling at par=24.3 cents, penny=2.03 cents; exchange rate varies.

The following table shows the changes in rates for some of the leading industries:

WEEKLY WAGE RATES IN SPECIFIED OCCUPATIONS IN 1914 and 1924

[Shilling at par=24.3 cents, penny=2.03 cents; exchange rate varies]

Occupation	Average (un-weighted) of recognized rates of wages in large towns		Average per cent of increase	Occupation	Average (un-weighted) of recognized rates of wages in large towns		Average per cent of increase
	August 4, 1914	December 31, 1924			August 4, 1914	December 31, 1924	
Building trades:	<i>s. d.</i>	<i>s. d.</i>		Shipbuilding:	<i>s. d.</i>	<i>s. d.</i>	
Bricklayers.....	40 7	73 4	81	Shipwrights.....	41 4	55 7	35
Masons.....	39 7	73 7	86	Ship joiners.....	40 0	57 9	44
Carpenters and joiners.....	39 11	73 4	84	Laborers.....	22 10	38 5	68
Plumbers.....	39 8	73 5	85	Printing and bookbinding:			
Plasterers.....	40 0	73 8	84	Hand compositors, book and job.....	35 8	73 9	107
Painters.....	36 3	72 1	99	Bookbinders and machine rulers.....	33 11	73 4	117
Laborers.....	27 0	55 5	105	Furniture making:			
Engineering:				Cabinetmakers.....	39 9	74 8	88
Fitters and turners.....	38 11	56 6	45	Upholsterers.....	38 9	74 6	92
Iron molders.....	41 8	60 0	44	French polishers.....	37 1	74 5	101
Pattern makers.....	42 1	60 11	45	Baking: Table hands.....	30 1	64 8	115
Laborers.....	22 10	40 2	76				

The above figures represent the rate for a full ordinary week, with no allowance for unemployment or lost time. It will be seen that there is no uniformity in the advances secured, and that some of the trades, notably the engineering and shipbuilding industries, have not maintained their pre-war level of real wages. (In December, 1924, the cost of living index, as compared with July, 1914, stood at 181.) Weekly hours had been rather generally reduced during the period, so that a study of hourly rates would show a greater percentage increase than the weekly rates.

In coal mining the wage rates are calculated in such a complicated manner that finding their percentage increase would be rather difficult, but changes in the average earnings per shift are shown in the following table:

AVERAGE EARNINGS PER SHIFT IN COAL MINES, 1914 AND 1924

[Shilling at par=24.3 cents, penny=2.03 cents; exchange rate varies]

Locality	Average earnings per shift		Per cent of increase
	June, 1914	December, 1924	
	<i>s. d.</i>	<i>s. d.</i>	
Northumberland.....	6 2½	9 5	52
Durham.....	6 2½	10 0	61
Yorks and East Midlands.....	6 7½	11 8	76
Lancashire, North Staffordshire, and Cheshire.....	6 0½	10 0¾	67
South Wales and Monmouth.....	6 9	10 10½	61
Scotland.....	6 9	10 8	58
Other districts.....	5 6¼	9 5	71
Total, all districts.....	6 5¾	10 8¾	66

It should be observed that the hours of labor were reduced in 1919 from 8 to 7 per shift for underground workers, and generally from 51 to 58 in 1914 to 46½ per week for surface workers. The percentage increases in hourly wages are thus greater than the percentage increases in earnings per man shift shown above.

In the cotton industry, piece rates prevail and hours have been reduced since 1914. "If proportionate allowance is made for this reduction in working hours, weekly full-time wages would appear to be generally about 61 per cent above the pre-war level, the equivalent increase in hourly wages being about 86 per cent." In the wool textile industry, in which wages consist of basic piece rates with cost-of-living allowances, it is calculated that the various increases brought weekly rates up to approximately 80 to 90 per cent above the pre-war figures. In the boot and shoe industry the minimum time rate for the majority of skilled male workers in 1914 was 30s.¹ a week in most districts; in 1924 it was 60s.

For men in the heel-building department and in the stock and shoe rooms, the minimum rate at December, 1924, was 57s. a week compared with a rate of 27s. a week adopted in 1914, with effect from the beginning of 1915. For women of 20 years or over, employed in certain operations in the closing and heel-building departments, and the stock and shoe rooms, the minimum rate was 36s. a week in December, 1924, compared with 17s. or 18s. adopted in 1914, with effect from January, 1915. The hours of labor have been reduced from 52½ per week in 1914 to 48 per week.

Considering the situation generally, the Gazette thus summarizes conditions:

Both the amounts and the corresponding percentages of increase over pre-war rates show a wide diversity among different classes of workpeople. In some cases the increases in full-time weekly rates at the end of December, 1924, were equivalent to less than 30 per cent on the pre-war rates. On the other hand, they were equivalent in some cases to over 100 per cent on the pre-war rates. The information at the disposal of the department is insufficient to enable the average percentage increase for all industries and occupations to be calculated exactly, but it is estimated that at the end of December, 1924, weekly full-time rates of wages of adult workpeople, in the industries for which information is available, averaged between 70 and 75 per cent above the level of August, 1914, as compared with 170 to 180 per cent at the end of December, 1920, when wages generally were at their highest level. As considerable reductions in normal weekly working hours were made in nearly all industries in 1919 and 1920, the percentage increase in hourly rates of wages since 1914 is substantially greater; while it is not practicable on the basis of available information to make any precise calculation, it seems probable that at the end of December, 1924, the average level of hourly rates of wages was about 90 to 100 per cent above that of August, 1914.

The average percentage increase in weekly full-time wages at the end of each quarter during the past five years, as compared with the beginning of August, 1914, is estimated, on the basis of such information as is available, to have been approximately as shown below:

PER CENT OF INCREASE IN FULL-TIME WAGES, 1920 TO 1924

[August, 1914=100]

Year	Estimated average per cent of increase in weekly full-time wage at the end of—			
	March	June	September	December
1920.....	130-135	150-155	160-165	170-180
1921.....	160-170	145-155	130-135	110-115
1922.....	100-105	85-90	75-80	70-75
1923.....	70	65-70	¹ 70	65-70
1924.....	¹ 70	70	70-75	70-75

¹ Nearly.

It should be observed that the foregoing particulars relate to rates of wages for full-time working, and that no account is taken of the loss of actual earnings resulting from unemployment and short-time working, or of the effects of increased or reduced exertion on the earnings of workpeople paid at piece rates of wages, as to which comprehensive statistics are not available.

² Shilling at par=24.3 cents; exchange rate varies.

Wages in Various Occupations in Haiti

A RECENT communication from the American consul at Cape Haitien, Haiti, dated February 10, 1925, shows the wages paid to various classes of workers in Haiti. The statement below shows the average daily or monthly wages paid during the preceding year for the 10-hour working day in the specified occupations, given in United States currency.

	Per day	
Carpenters, masons, etc.....	\$1. 75	
Coffee sorters (piecework).....	\$0. 15- .40	
Common laborers.....	. 20- . 30	
	Per month	
Bank tellers.....	\$60. 00-\$80. 00	
Cashiers (stores).....	100. 00-150. 00	
Cooks.....	¹ 8. 00- 15. 00	
Domestic servants.....	¹ 3. 00- 6. 00	
Messengers, typists, clerks.....	10. 00- 25. 00	
Shoemakers, woodworkers, tailors.....	5. 00- 25. 00	

¹ With board.

PRODUCTIVITY AND EFFICIENCY OF LABOR

Productivity of Labor in Selected Coal Mines in Illinois

THE forty-third annual coal report of Illinois, for the fiscal year ending June 30, 1924,¹ gives as usual, in addition to a number of summary tables and classifications, the detailed schedules from each mine, thus making it possible to study individual mines or groups of mines over a series of years and to make studies not contemplated in the report itself. The report also shows the thickness of the seam of coal in which the miners work.

From the 1924 report and those of the two previous years, the Bureau of Labor Statistics has compiled information as to the production per day for miners (as distinguished from other mine employees) in the Illinois shipping mines.² No local wagon mines are included. The data are here presented separately for (1) strictly pick mines, that is, mines in which the old hand-pick process is still exclusively used, and (2) strictly machine mines. For the purposes of this study mines using both the hand-mining and machine-mining systems in the same plant are ignored. Only the "coal getters" are included. In the machine mines these include the loaders, machine helpers, and machine runners. In pick mining the miner does all of the work of cutting and loading the coal, whether the system be that of undercutting, shearing one or two sides and wedging the coal, or of "blasting from the solid." In both of the tables given in the present article, "shot firers" have been excluded.

The system of mining in Illinois is almost exclusively "pillar and room" work. The only long-wall exclusively hand-pick mines are the first two mines shown in Table 1, which are in the northern part of the State in a thin seam where the work was started under the long-wall system. The figures in this table cover the entire year's work in every one of the strictly hand-pick mines in Illinois.

It should be remembered that in reporting the number of days in operation, mines report the so-called "tipple time"; in other words, the days upon which the mine was loading coal into railroad cars for shipment. The trouble here is, of course, that the tipple might be operating when the mine itself was not, or when it was being only partially operated. Again, the time of the miner is computed on the basis of the number of days on which coal mined by him is hoisted, this being shown by his brass check number on the pit cars. It might happen that coal was hoisted on a day when the particular miner was not in the mine at all, he having filled his quota of pit cars

¹Illinois, Department of Mines and Minerals. Forty-third annual coal report of Illinois, 1924. [Springfield, 1924?]. 375 pp.

²The 1924 report covers 333 shipping mines.

the evening before and attached his check number to each one. Again, and this is particularly true in the case of pick mining, a man may have worked all day in the mine and sent up no coal at all, hence the records would not show he was in the mine. The method here used to ascertain the average number of persons employed in any occupation was to add up the number of persons given on each pay roll as working at that occupation and divide this by the number of pay rolls. It will be seen that this absorbs all the labor turnover not only for each pay roll but for all the pay rolls, and exaggerates the number of employees in the occupation to the extent of the turnover. The output per man, in tons, as shown in Tables 1 and 2, is therefore below the real figure to the extent that the labor turnover inflates the number of actual full-time workers.

TABLE 1.—TONS MINED PER PICK MINER PER DAY, 1922 TO 1924

County and mine	Thickness of seam (feet)			Tons mined per pick miner per day		
	1922	1923	1924	1922	1923	1924
Bureau County:						
St. Paul Coal Co., No. 2.....	3.6	3.6	3.5	4.0	(¹)	3.0
Grundy County:						
Chicago, Wilm. & F. C. Co., No. 3.....	3.0	3.0	3.0	3.1	3.8	3.3
Fulton County:						
Ellisville Coal Mining Co., Spoonriver.....	3.6	4.6	4.5	5.4	5.4	4.8
Logan County:						
Brewerton Coal Co., No. 2.....	(¹)	5.8	5.3	(¹)	4.3	4.0
Sangamon County:						
Peabody Coal Co., No. 6.....	6.0	6.0	6.5	4.9	8.3	5.6
Springfield Dist. Coal M. Co., No. 55.....	5.6	5.6	6.0	4.5	5.0	5.2
Springfield Dist. Coal M. Co., No. 54.....	(¹)	7.0	7.0	(¹)	5.6	6.0
Springfield Dist. Coal M. Co., No. 53.....	5.8	5.8	5.7	5.6	4.3	4.5
Springfield Dist. Coal M. Co., No. 52.....	5.1	5.1	5.9	4.8	4.6	4.6
West End Coal Co.....	6.0	6.0	5.7	5.8	5.5	6.1
Citizens Coal M. Co., "B".....	5.8	5.8	5.5	6.4	5.7	6.1
Springfield Dist. Coal M. Co., No. 57.....	5.6	5.6	5.9	6.2	4.3	4.3
Peerless Coal Co.....	5.1	5.1	5.7	5.9	5.5	6.0
Brewerton Coal Co., No. 1.....	(¹)	6.0	5.9	(¹)	4.4	5.0
Sangamon Coal Co., No. 2.....	5.9	5.9	5.9	4.8	5.6	5.6
Spring Creek Coal Co.....	5.8	5.8	5.9	6.5	7.4	6.4
Union Fuel Co., No. 5.....	6.0	6.0	6.0	5.3	3.9	5.9
Christian County:						
Springfield Dist. C. M. Co., No. 58.....	9.0	9.0	7.5	4.2	6.5	6.8
Pana Coal Co., No. 2.....	7.6	7.6	7.0	(¹)	(¹)	9.1
Vermilion County:						
U. S. Fuel Co., Kelly, No. 4.....	6.0	7.0	6.2	6.0	6.8	7.3
St. Clair County:						
Perry Coal Co., Taylor.....	7.6	7.0	7.5	8.3	5.9	8.0
Perry Coal Co., St. Ellen.....	7.0	(¹)	7.0	8.0	(¹)	5.3
Groom Coal Co.....	7.0	7.0	7.0	7.2	7.3	7.0
Kolb Coal Co., No. 2.....	7.0	7.0	6.5	8.5	11.3	9.5
Eldnar Coal Co.....	7.0	7.0	7.0	5.1	6.3	6.8
Southern Coal, C. & M. Co., No. 1.....	6.6	6.6	6.5	6.3	6.6	6.6
Williamson County:						
Federal Coal Co., No. 25.....	9.0	9.0	9.5	7.3	7.0	9.2
Average.....	6.1	6.2	6.1	5.6	5.5	5.5

¹ Not reported.

TABLE 2.—TONS MINED PER MACHINE MINER PER DAY, 1922 TO 1924

County and mine	Thickness of seam (feet)			Tons mined per miner per day		
	1922	1923	1924	1922	1923	1924
Peoria County:						
Crescent Coal Co., L. M. No. 1.....	4.0	4.0	4.2	4.6	6.1	6.5
Sangamon County:						
Madison Coal Corp., No. 6.....	8.0	8.0	7.5	10.0	9.4	9.4
Chicago, Wilm. & F. Coal Co.....	6.1	6.1	6.5	8.5	7.3	8.3
Christian County:						
Peabody Coal Co., No. 7.....	7.0	7.0	7.0	8.7	8.3	8.4
Peabody Coal Co., No. 8.....	6.6	6.6	7.0	9.1	7.8	7.3
Peabody Coal Co., No. 9.....	7.0	7.0	7.5	11.3	9.6	10.0
Macoupin County:						
Superior Coal Co., No. 3.....	7.5	7.5	7.6	11.0	11.2	11.0
Superior Coal Co., No. 4.....	7.5	7.5	7.0	9.1	9.8	9.4
Superior Coal Co., No. 1.....	7.6	7.6	7.0	9.0	9.1	9.6
Superior Coal Co., No. 2.....	7.5	7.5	7.5	10.5	10.6	10.7
Standard Oil Co., No. 2.....	7.0	7.0	6.2	5.7	9.7	9.3
Consolidated Coal Co., No. 7.....	7.0	7.0	7.0	9.7	11.2	10.2
Montgomery County:						
Shoal Creek Coal Co., No. 1.....	7.0	7.0	6.2	8.6	8.0	8.4
Ind. & Ill. Coal Corp., No. 11.....	8.0	7.0	7.0	7.0	7.2	8.0
Hillsboro Coal Co.....	8.0	8.0	7.5	9.3	9.3	9.3
Madison County:						
Mt. Olive & Staunton Coal Co., No. 2.....	6.8	6.8	6.9	8.8	8.2	8.6
New Staunton Coal Co., No. 1.....	6.0	6.0	6.2	10.1	9.6	8.5
Lumaghi Coal Co., No. 2.....	8.6	8.6	8.0	10.2	9.5	8.8
Donk Bros. Coal & C. Co., No. 4.....	5.1	5.1	6.0	7.9	9.0	8.4
Donk Bros. Coal & C. Co., No. 2.....	8.0	8.0	7.0	10.7	10.1	9.7
St. Clair County:						
St. Louis & O'Fallon Coal Co., No. 2.....	6.6	6.6	6.0	8.8	8.8	9.0
Jackson County:						
Union Colliery Co., Kath.....	8.3	8.3	8.7	9.9	11.9	8.2
Perry County:						
Security Coal & M. Co., No. 1.....	7.6	7.6	7.5	10.4	7.1	8.6
Randolph County:						
Madison Coal Corp., Crystal.....	6.0	6.0	6.0	6.9	8.5	7.5
Moffat Coal Co.....	6.0	6.0	6.0	14.4	8.5	8.0
Illinois Fuel Co., No. 4.....	6.0	6.0	6.0	7.6	7.0	7.2
Franklin County:						
Bell & Zoller M. Co., No. 2.....	(1)	12.0	12.0	9.1	8.0	8.8
Chicago, Wilm. & F. Coal Co., O., No. 2.....	(1)	(1)	9.5	(1)	14.2	10.1
Saline County:						
Saline Co. Coal Corp., No. 3.....	(1)	(1)	6.0	(1)	(1)	8.2
Saline Co. Coal Corp., No. 7.....	(1)	(1)	5.9	(1)	(1)	8.6
O'Gara Coal Co., No. 15.....	5.0	5.0	5.0	7.7	8.4	8.3
O'Gara Coal Co., No. 1.....	4.8	4.8	5.3	6.8	6.0	6.7
O'Gara Coal Co., No. 3.....	6.0	5.0	5.5	7.2	7.1	7.3
O'Gara Coal Co., No. 10.....	4.8	4.8	5.0	7.2	7.7	7.4
Wasson Coal Co., No. 1.....	6.0	5.8	5.5	8.5	8.3	8.0
J. K. Dering Coal Co., No. 2.....	6.0	6.0	6.0	7.7	6.4	6.8
Southern Counties C. Co., No. 20.....	4.1	4.1	4.5	5.4	6.7	6.9
Williamson County:						
Madison Coal Corp., No. 12.....	8.0	8.0	7.5	7.3	6.3	8.1
Cosgrove-Meehan C. Co., No. 3.....	(1)	7.0	5.7	(1)	8.6	13.3
Average.....	6.7	6.8	6.6	9.0	8.6	8.6

¹ Not reported.

Production Per Man in Coal Mines of Nova Scotia and of the United States, 1908 to 1924

A COMPARISON of tons (2,000 pounds) of coal produced per man employed in the coal mines of Nova Scotia and of the United States, from 1908 to 1924, presented in the annual report on mines for 1924 of the Department of Public Works and Mines of Nova Scotia shows that during the 17-year period an average of 543 tons per man was produced in Nova Scotia and of 726 tons in the United States. The yearly production per man is shown in the following table:

TONS OF COAL PRODUCED PER MAN EMPLOYED IN COAL MINES OF NOVA SCOTIA AND OF THE UNITED STATES, 1908 TO 1924

Year	Tons ¹ produced per man employed		Year	Tons ¹ produced per man employed	
	Nova Scotia	United States		Nova Scotia	United States
1908.....	545	603	1918.....	569	890
1909.....	545	691	1919.....	523	712
1910.....	558	692	1920.....	563	839
1911.....	553	682	1921.....	491	615
1912.....	572	740	1922.....	424	565
1913.....	590	762	1923.....	540	756
1914.....	536	673	1924.....	369	
1915.....	569	724			
1916.....	665	818	Average.....	543	726
1917.....	628	860			

¹ Of 2,000 pounds.

Flour Production in China

IN AN article on "Wheat flour mills in China" in the *Northwestern Miller*, March 18, 1925, a description is given of the modern flour mills now being erected, as contrasted with the primitive mills of which there are thousands still in operation throughout China. Even in those mills which are modeled on modern lines and in which the machinery and equipment are of the best American make, the abundance of cheap coolie labor available still makes for inefficiency.

In North and South America every five to eight story mill has its grain storage elevator of an equal height, while in China in place of the elevator there will be, within the walls of a compound, a number of low one-storied godowns in which the grain is stored. Inside of these godowns a small army of coolies will be found, each one engaged either in carrying an enormous bag of wheat from the landing place several hundred feet or yards distant and piling it in a huge pile in the godown or in tearing down another huge pile of sacks and "dog trotting" with the bags into the cleaning department of the mill which is also perhaps 100 yards distant.

In America from 20 to 30 workmen only are required to operate both the elevator and the mill of a 1,000-barrel flour mill, while in China a mill having the same output requires from 130 to 160 men. An efficient mill superintendent in this country will bend every effort toward reducing labor and operating costs to a minimum while in

China the mill seems to be a sort of benevolent institution where each poor relative of the officials, managers, etc., may find a place. An example is cited of a mill, supervised by a Chinese coolie miller, in which there was not sufficient bin storage and as a result the mill had been hiring 16 coolies at a cost of over \$200 a month to keep bins filled. There being plenty of space for additional storage facilities it was planned to remedy the situation, but four months later when the manager was asked why this had not been done he replied that the poor coolies needed work and that he felt it his duty to keep them on or otherwise they would starve. This plant employed 80 men in the mill and 28 in the office to carry on a business which in America would employ 16 men.

In connection with these statements as to the lack of efficiency in the Chinese milling industry at the present time it is of interest to note the production capacity of mills and the output per worker in modern mills in Manchuria as reported in the Chinese Economic Bulletin, January 10, 1925, published by the Chinese Government Bureau of Economic Information at Peking.

The following table showing the average number of workers, the daily output in pounds, the average output per worker, and the amount of capital invested per worker and per 100 pounds produced has been compiled from the figures given in the bulletin.

AVERAGE OUTPUT PER WORKER, CAPITAL INVESTED PER WORKER, AND CAPITAL INVESTED PER 100 POUNDS PRODUCED—FLOUR MILLS OF MANCHURIA

[Mexican dollar=56.43 cents. Yen at par=49.85 cents; exchange rate varies]

Name of company	Number of workers	Average daily output (pounds)	Average daily output per worker (pounds)	Capital	Capital invested per worker	Capital invested per 100 pounds produced per day
<i>Heilungkiang Province</i>						
Kwang Kee Flour Co.....	130	36,070	277	\$400,000	\$3,077	\$1,109
Teh Tseng Flour Co.....	45	18,035	401	150,000	3,333	832
Teh Chang Flour Co. (Ltd.).....	68	36,070	530	200,000	2,941	554
Wan Feng Yi Flour Partnership Co.....	120	64,926	541	180,000	1,500	277
Yung Tsi Flour Co. (Ltd.).....	60	64,926	1,082	240,000	4,000	370
Chen Chang Modern Flour Co.....	150	54,105	361	800,000	5,333	1,479
Yung Yeh Kwang Flour Co.....	50	3,607	72	170,000	3,400	4,713
<i>Chinese Eastern Railway Zone</i>						
Yung Yuan Flour Co.....		28,856		50,000		173
Chang Ning Flour Co.....		18,035		40,000		222
Yu Shun Li Flour Co.....		36,070		50,000		139
Schwang Ho Cheng Flour Co.....		36,070		100,000		277
<i>South Manchuria</i>						
Manchuria Flour Mfg.....		14,800		5,750,000		
Schwang Ho Mill.....		11,500		500,000		
Tien Hsing Fu Co.....		12,000		800,000		
Yu Chang Ywan.....		12,000		1,500,000		
Asia Hsing Yeh Co.....		12,000		300,000		
China Flour Mfg. Kaisha.....		14,000		5,000,000		
Heng Mow Flour Co. (Ltd.).....		11,000		300,000		
Asia Flour Mfg. Kaisha.....		12,000		2,000,000		
Sino-Japanese Flour Mfg. Kaisha.....		1300		200,000		
Manchuria Flour Mfg. Kaisha.....		12,000		5,750,000		

¹ Bags.

² Yen.

WOMEN IN INDUSTRY

Effect of Industrial Employment on Health of Woman Workers

AN ARTICLE on the influence of industry on the health of woman workers, by Dr. George Gelhorn, in the *Nation's Health*, March, 1925 (pp. 165 et seq.), points out the dangers to the individual woman and to the race in the increasing participation of women in the industrial work of the country. Since the beginning of the present century there has been a steadily growing number of women entering industry, and this movement, which was accentuated during the war, has continued since the industrial crisis of that period has passed.

During the past quarter of a century there has been a marked shifting of the number of women employed in the various branches of industry. The greatest decrease in any one class of employment is that of servants and laundresses, the number in these occupations decreasing by approximately 431,000 in the period from 1910 to 1920, although in other branches of personal service there have been large increases in the numbers of women employed. There have been many additions to the number of woman workers also in the semiskilled occupations in many industries, including electric supply, automobile, and iron and steel works; and women outnumber men in the clothing industries, silk mills, knitting mills, candy factories, and paper-box factories, and in other industries less important numerically. Women are also employed in the skilled hand trades such as bakeries, the printing and jewelry trades, and the metal trades, though not in increasing numbers. In 1920 the number of women employed in transportation was practically twice that of 1910, more than 84 per cent of the increase being in the single occupation of telephone operator. When the hundreds of thousands of women employed in stores and offices are added to the list it is evident that a large percentage of the industrial and commercial work of the country is performed by women.

The harmful effects of modern industrial life have been recognized for years, but they became even more evident during the war, when in such highly developed industrial countries as England and the United States such a large proportion of young men examined for military service were rejected because of physical unfitness.

Although there is not much statistical information to prove that the effect of industrial life is more severe on women than on men, the sickness insurance statistics of European countries show that women do not stand the strain so well and that they have more lost time on account of sickness than men. Although the occupation is considered the most important factor in causing a high sickness rate among women, there are other factors, such as household cares and the bearing and rearing of children, which contribute to the result.

Fatigue is the normal result of all human action, and the accumulation of poisons in the system which results from any increase in activity either physical or mental is repaired during rest, when such fatigue is within normal limits. Excessive fatigue, however, is one of the most important effects of industrial employment, and when there is not sufficient rest or when the organism is pushed beyond its limits by further forced exertions, fatigue becomes abnormal and pathological. Among the chief causes of overfatigue are speed, monotony, noise, and poor ventilation and lighting of work places. Speed is one of the most important of these, and examples are cited of the telephone industry, in which the average calls per hour for an operator are 225, or about $3\frac{1}{2}$ per minute, an average which is often exceeded at the busiest times of the day, and of the needle trades, where a girl tends a sewing machine carrying 12 needles making 4,000 stitches a minute, or 2,400,000 in 10 hours, often under a bright light and with unshaded eyes and in a deafening roar of machinery.

Speed combined with monotony is exemplified in the pea-canning industry, in which a girl inspects two cans of peas per second, or 72,000 per day, and where the cappers place the caps on the cans at the rate of 60 to 80 per minute, and in the shoe industry where an expert worker in the eyeletting department may make 48,000 eyelets per day. Overtime, which is worked in many industries at the rush seasons, adds to the fatigue already produced by the excessive speed and monotony, which in many cases is accentuated by the length of the regular working-day. In only five States is the 48-hour week fixed by law, 29 States allow women to work from 55 hours to more than 70 hours a week, and 6 States place no limitation whatever on the hours women may work.

Women are far more susceptible to fatigue than men; and while there is no definite sequence of symptoms, malnutrition and anemia are extremely common among woman workers who are suffering from fatigue. Headaches are among the most important causes of absenteeism, and while headache is a symptom of many conditions not caused by the occupation, it is a frequent result of fatigue poisoning, the glare of electric light, the noise, the haste, and all the other factors of modern industrial life. This applies also to constipation, which is almost universal among female workers, and to nervousness which manifests itself in many ways.

Fatigue lowers the power of resistance to contagious or infectious diseases and is a decided factor in the progress of certain constitutional diseases. As is generally well understood, fatigue is of great importance in increasing the liability to accidents. It has been shown that women's accidents are almost twice as numerous as those of men when the fatigue conditions are similar and that they reach their peak in the late afternoon hours.

In addition to the harmful effects of fatigue upon women, there are the hazards from poisonous substances and from dust, humidity, extremes of temperature, etc. To some of these hazards, such as lead poisoning, women are peculiarly susceptible. The effect of the employment of women on the next generation is shown in the reduction in the birth rate, a comparison of the rate of factory workers with home industry workers, showing a distinctly lower birth rate among the former, while the relation between the industrial work of

women and a high infant mortality rate is well established. Industrial poisons, particularly lead, are responsible for the premature births and miscarriages, as is also the overstrain of factory life, especially if the work involves continuous sitting or standing, repeated lifting, reaching, or stretching, jolting, or any work requiring new muscle adaptations. In many cases, too, these results may be traced to the harmful effects of industrial employment on the adolescent girl.

In summing up the survey of the effect of industry on women, the writer advocates physical examinations, at the time of employment, for all workers and the provision of suitable employment for those rejected. This he considers could be secured by means of official agencies, either State or Federal, if there were enough of them and if they developed a system by which it could be known where workers were needed. The final step in the development of protection for woman workers he believes must come through education rather than legislation. Education of the workers as to personal hygiene; of the employers as to the advantages—industrial, physical, social, and moral—of improvement in working conditions; and of the medical profession generally as to the value of studying the problem from every angle.

MINIMUM WAGE

Recent Minimum Wage Reports

Massachusetts

THE report of the Department of Labor and Industries of Massachusetts, division of minimum wage, for the year ending November 30, 1923, is a very brief statement of the activities of the minimum wage board and their results. Inspections were made under 11 decrees. There were outstanding at the beginning of the year 4,465 cases of noncompliance, affecting 373 establishments. Further inspections disclosed 828 new cases in 85 of these establishments. The penalty of publicity was used in the case of 44 firms which had also been advertised in 1921. In the case of the other firms a number of adjustments were made, practically closing out the irregularities found. The end of the year showed still pending 113 cases of noncompliance in a single firm, an estate that was advertised in 1921, being an employer of office cleaners. In the new inspection work of the year 1,401 cases of noncompliance in 251 establishments were discovered. Thirty-four of these establishments, in which were 377 cases, were advertised, the remainder of the cases being adjusted in various ways, with the exception of 16 cases in 8 establishments which were still pending at the end of the year.

Changes in orders and in the legal status of the question of advertising delinquents of later date than the report have received attention in issues of the MONTHLY LABOR REVIEW, for August, 1924 (p. 174); December, 1924 (p. 64); and January, 1925 (p. 70). The latest event in this field is the issue of a wage decree for the bread and other bakery products industry. This is the first decree for the occupation covered, and provides a minimum rate of \$13 per week for women of ordinary ability, with rates of \$9 and \$11 per week, respectively, for beginners under 16 years of age and those 16 years of age and over. The occupations include the manufacture of bread, cake, crackers, and similar bakery products. The decree becomes effective May 1, 1925.

Mention is also made in the advance notice containing the above information of the fact that the millinery wage board recently established has recommended a similar minimum rate for adult experienced workers, with special rates ranging from \$6 to \$12 per week for learners, according to age and length of experience. The budget on which this recommendation was based totaled \$13.90, but "owing to the financial condition of the industry, the board recommended a rate of \$13 a week." If this recommendation is approved it will supersede existing rates of \$10 and \$11, respectively, for the wholesale and retail branches of the trade.

In addition to the foregoing it is reported that "the minimum wage commission is reconvening the wage board for the candy occupation and is forming a new board to recommend minimum rates of wages for women employed in the manufacture of stationery goods and envelopes." There is also an investigation in progress of the wages of women employed in the manufacture of boot and shoe cut stock and findings.

North Dakota

IN THE analysis of the third biennial minimum wage report of North Dakota, which appeared in the MONTHLY LABOR REVIEW for March (p. 101), use was made of certain data on wages paid by telephone companies in the State. It was there said that "three large companies dominate the State," the rates paid being set forth. A more careful reading of the figures discloses the fact that they are void of significance as regards actual wages, as they are the monthly sums paid for the maintenance of agency exchanges, in which "one operator is hired to look after the exchange and hire whatever help is needed out of the one salary provided. It is quite common to furnish living quarters and sometimes heat and light to such agents."

The report presents data for towns of 1,800 population and over, showing that the North Dakota Independent Telephone Co. employs 32 workers in such localities at a median monthly wage of \$68.96 and 27 inexperienced workers at a median wage of \$56.90. The Northwestern Bell Telephone Co. had 145 experienced workers receiving a median wage of \$72.40 and 40 inexperienced workers at \$58.75. Independent lines reported 37 experienced workers with a median monthly wage of \$58.44 and 10 inexperienced workers at \$50.

The rates for towns with a population under 1,800 are lower, as fixed by the department, though as reported, the independent lines paid a higher median monthly wage for their experienced help in such localities than in the larger places, the amount being \$63.75. The other companies show a lower median, but still running above the fixed minimum.

Minimum Wage Law of San Luis Potosi, Mexico

THE principal features of the minimum wage law of the State of San Luis Potosi, Mexico, as signed by the governor of that State on January 22, 1925, and published in the *Diario Oficial* of March 9, 1925, are given below.

Sections VI, VII, and IX of article 123 of the Federal constitution of Mexico form the basis for this law, being as follows:

"The minimum wage to be received by a workman shall be that considered sufficient, according to the conditions prevailing in the respective region of the country, to satisfy the normal needs of the life of the workman, his education and his lawful pleasures, considering him as the head of a family. * * * The same compensation shall be paid for the same work, without regard to sex or nationality. The determination of the minimum wage * * * shall be made by special commissions to be appointed in each municipality and to be subordinated to the central board of conciliation to be established in each State.

The law provides for the organization of special permanent commissions, subordinate to the central board of conciliation and arbitration, in each municipality, to be composed of seven members—three representatives each of the workers and the employers, and one of the municipal authority—whose duty is shall be to fix a minimum wage. In municipalities where the workers are organized they are to hold a convention and appoint representatives, but in those municipalities where there are no labor organizations a meeting of 25 workers may appoint the representatives. Employers' representatives are to be appointed in the same manner. For each representative two alternates are to be appointed. The members of the commissions are to be named on November 30 of each year, on which date they shall meet and proceed to compile a directory classifying the enterprises of the municipality according to the kind and nature of work done. The directory shall specify the number of workmen employed in each establishment, the wages paid, machinery used, living and climatic conditions, and any other circumstances deemed pertinent by the commission. The minimum wage shall then be determined in the presence of the interested parties.

The commission also have arbitral powers in disputes as to the said wage, and their findings are to have the character and force of law. The employer or workers may, however, within two weeks from the date of the finding, appeal to the central board of conciliation and arbitration, whose decision shall be final.

The fact that a wage has been set by the commission does not exempt employers from other obligations in favor of the workers imposed upon them by article 123 of the constitution, nor exempt them from privileges which they had voluntarily granted prior to the fixing of the wage.

The minimum wage is exempt from attachment and discount. Equal wages are to be paid for equal work regardless of sex or nationality.

Employers or their agents who discharge a worker as a result of the setting of a minimum wage are required to reemploy him or pay him an amount equivalent to three months' wages as fixed by the commission. An employer who shuts down in his establishment while the commission is carrying on an investigation therein prior to the fixing of the minimum wage, with the object of opposing the new rate, will be required to pay to each worker an amount equivalent to three months' wages.

No case involving the application of this law is to be tried in a common law court.

LABOR AGREEMENTS AND AWARDS AND DECISIONS

AGREEMENTS

Alaska Railroad

AN AGREEMENT, dated January 16, 1925, has been made with the engineers, firemen, conductors, baggagemen, and brakemen of the Alaska Railroad. Grievances are to be presented to the superintendent within 60 days. Notification of offenses involving suspension or discharge is to be given employees in writing. The Chicago hours of service rules effective April 1, 1908, are given in full. Some of the rules and rates of pay are as follows:

Rates of pay.—Rates for all service shall be as follows:

Class of employees	Per mile	Per day	Monthly minimum
Engineers.....	\$0.0804	\$8.04	\$241.20
Firemen.....	.0600	6.00	198.00
Conductors.....	.0768	7.68	230.40
Baggagemen.....	.0600	6.00	198.00
Brakemen.....	.0640	6.40	192.00

Basic day.—In all road service, 100 miles or less, or eight hours or less (straight-away or turn-around), shall constitute a day's work. Miles in excess of 100 will be computed at the mileage rates provided.

Computed allowance.—Time allowance shall be computed by adding together all hours made or credited to each man in the month. If the sum exceeds 240 hours, all hours in excess of 240 shall be paid for at one-eighth of the daily rate. The mileage made shall also be added and if the sum exceeds 3,000 miles, shall be paid for at the mileage rate. Miles or hours shall be paid, whichever produces the larger amount. Should neither the miles or hours produce the monthly minimum, the monthly minimum shall be paid. All time worked or held for duty in excess of eight hours shall be computed on the minute basis.

Days worked per month.—(a) Crews shall not be required to work more than 26 days per month, except in cases of necessity. So far as practicable, the lay-off day shall be on Sunday. It is understood that it may be necessary for work train, and in some instances other crews, to work Sundays and holidays; but the policy shall be to avoid Sunday and holiday work.

Trainmen and enginemen who are ready for service the entire month and do not lay off of their own accord are to receive the monthly guaranty provided for. When the regular man does lay off on his own accord the extra man will receive the same compensation that the regular man would have received and this amount will be deducted from the regular man's pay. Members of the crew held at other than home terminal are to be allowed 8 hours out of each 24. Conductors and engineers will report the time of their brakemen and firemen with their own. If any time is disallowed, notification is to be given them at once of the reasons for this. Crews are to be called 1½ hours before leaving time of train. When

the crew are not called in turn they will be credited with four hours. If they report for service and are not used they will be credited with the time held until released.

Crews will not be tied up between terminals except in case of delays due to wrecks, washouts, or snow blockades, when they will be credited with the first eight hours so held in addition to time or miles made that day, and for each succeeding calendar day will be allowed not less than eight hours or 100 miles. No duplicate payments shall be made under this rule.

Mileage allowances will be computed on time-table distances.

Deadheading on railroad business is paid for at full time at minimum of eight hours or 100 miles, but is not paid for when a trainman is going to take a run at his own request to which he is entitled through seniority.

Conductors and engineers acting as pilots are to receive the pay in their respective classes. Pilots on snowplows receive conductor's pay.

When deductions are made from trainmen's and enginemen's pay they will be given a statement in writing if they request it. Upon leaving the service, men are to be paid in full at the earliest practical time.

Seniority.—Seniority lists of all engineers, conductors, baggage-men, and brakemen are to be prepared and posted by superintendents on January 1 and July 1 of each year. Trainmen rank upon the list from the date of their appointment or promotion.

Firemen are placed upon the firemen's roster from the date of their first service and then are promoted to the position of engineer after passing three examinations. Two firemen, when available, are to be promoted for every new engineer hired. The seniority date of a hired engineer, one who has had at least two years' experience on a recognized railway system, is to be the date of his employment. Baggage-men will be taken from the brakemen's seniority roster.

One conductor will be hired for every two brakemen promoted. Conductors will be given a certificate dated the day they pass the examination, which will be their date on the conductor's seniority list. No conductor will be hired who has not had at least two years' experience on a steam, surface railroad and preference is to be given conductors in service as brakemen.

Trainmen and enginemen laid off on account of reduction of force will be given a service letter and leave of absence for not more than six months. They must keep the superintendent advised of their address and respond promptly when called for duty.

Annual passes will be granted to trainmen and enginemen whose seniority in service is two years or more, for themselves and families over the entire system. Those of less seniority will be given trip passes for themselves and families upon request. After five years of consecutive service they will be allowed the privilege of securing through their superintendents free transportation or a reduced rate for themselves and dependent members of their families, over the steamship lines and over any railroad in the United States, that the management is able to secure or is permitted by law to obtain.

Leave of absence exceeding six months, except for sickness or disability, will not be granted except by mutual consent of the management and the authorized representatives of the men.

Hostlers and hostlers' helpers.—Hostlers are to receive \$6.32 per day, 79 cents per hour, and \$190 monthly minimum for 8 hours' work, with 20 minutes given for lunch. The rates of pay of hostlers' helpers are to be fixed later, as well as the points where hostlers and helpers are to be employed and the classification of employees. The same guaranty of a month's full pay is granted to hostlers who were ready for service the entire month. One year's experience as fireman is required of hostlers. Seniority rights prevail except in positions filled by "a permanent fixture." No permanent hostler will be permitted to bid on or change to other hostling positions.

Yard service assignment.—Assignment of one conductor and two brakemen for each yard engine is made twice a year, May 1 and November 1, for six months' service in the yard. Regularly assigned yard crews are to have a fixed starting time, which shall not be changed without 12 hours' notice. They are to be allowed 20 minutes for lunch, from 4½ to 6 hours after starting work. While assigned to perform service within switching limits, yard men are not to be used in road service except in case of emergency.

Engines used in switching service are to be equipped with headlights and footboards and proper grab irons at both ends.

Approval of applications.—The applications of trainmen and enginemen entering the service will be approved or rejected within 90 days. When applicant is not notified to the contrary within the time stated, it will be understood that application is approved; but this article shall not operate to prevent the removal from such service of applicant if, subsequent to the expiration of 90 days, it is found that the information given by him in his application was false.

Bus Transportation—New Jersey

THE Public Service Transportation Co. of New Jersey, which recently has taken over several bus companies, made an agreement April 24, 1924, with its employees, members of nine local divisions of the Amalgamated Association of Street and Electric Railway Employees of America. The Public Service Railway Co. and the Public Service Transportation Co. have worked together harmoniously for the purpose of coordinating service between street cars and busses and employees are to be called upon for interchange of service. For this reason conditions and regulations of the agreement made October 1, 1923, with these same divisions have been made applicable to the employees of the transportation company. Both agreements are to be in force until October 1, 1926.

The wage and overtime scales paid to one-man and two-man car operators are also to be paid to one-man and two-man bus operators, namely, for the first three months of service 56 cents per hour, for the next nine months of service 58 cents per hour, and thereafter 60 cents per hour with 5 cents per hour extra for safety or one-man car or bus operators.

Provisions relating to reporting at other than the regular time, special runs, signing up for runs, seniority, and other sections in which references are made to trainmen, motormen, and conductors, are made to include bus operators.

The same privileges accorded to the trainmen in settlement of difficulties through arbitration, the provisions made for rest, for granting 10 cents additional pay per hour for instructing new men, for furnishing them a lunch or meal ticket when business is so heavy that there is not time to go to their boarding houses are extended also to bus operators. The one day off in eight (requested) is to be put into effect by the companies as soon as conditions make it possible.

Chauffeurs—St. Louis, Mo.

CHAUFFEURS' Local Union No. 405 made an agreement with the undertakers of St. Louis on January 1, 1925. A provision with regard to strike breakers has been included and arbitration is arranged for. Each employer is required to sign this agreement. Any employer who fails to discharge a man who does not join the union within 30 days after being employed is considered to have violated the agreement.

The minimum wage scale for chauffeurs is \$30 per week, paid on Saturday of each week. Chauffeurs hired occasionally for funeral work are to receive 30 per cent of the gross money earned, but no trip is to be made for less than \$3.60. When an undertaker who employs no man regularly has a funeral he is required to call on a man from local 405 and pay him \$4.50 for each funeral.

Sections relating to hours of labor and work expected of a chauffeur follow:

ARTICLE 3. A week's work shall consist of six (6) days' work, except in that week known as Christmas week, in which all chauffeurs will be off Christmas Day with full pay, in addition to their regular day off. Should a chauffeur be required to work on Christmas Day he shall receive as compensation for working Christmas Day a salary equal to two (2) days' pay. Chauffeurs to be notified prior to their quitting time the day before they are to be off.

ART. 4. A day's work shall consist of ten (10) consecutive hours, of which forty-five (45) minutes shall be granted to a chauffeur for lunch.

ART. 5. All members of local No. 405 shall receive time and one-half for all overtime; overtime to begin immediately after the completion of ten (10) consecutive hours of work.

ART. 6. A chauffeur's work consists of cleaning out the interior of car, dusting exterior of car, and keeping windows clean, but no washing of cars. A chauffeur employed by an undertaker owning and operating only one funeral car will be allowed to wash his car on the employer's time only where no washer is employed.

ART. 9. An extra chauffeur's work shall consist of dusting and cleaning out auto.

Machinists—Duquoin, Ill.

AN AGREEMENT, recently made by Duquoin Local No. 514 of the International Association of Machinists, to be binding until April 1, 1926, contains certain provisions which differ from the 1924 agreement.

There is no change in the wages for journeymen (75 cents an hour) and apprentices, and overtime is to be paid for at time and one-half but employees are not to be compelled to work longer than four hours' overtime in one day. "No employee shall be allowed to work longer than six days before joining the local union." The employers

agree to employ only union men or those "who are both eligible and willing to become members of said local union within a period of six days. Any person working after six days have elapsed after he is employed shall cease work until he is initiated in said local."

A shop committee is provided for, which is to be appointed by the machinists and be recognized as the authority to take up all grievances arising between machinists and the company management. If a firm or individual fails to come to an agreement with the shop committee the matter is to be referred to an officer of the International Association of Machinists and the proprietor or manager of said shop, by equal representation of each party concerned. The employer is given the right to lay off whomever he sees fit, instead of the last man hired, as before. It is considered a violation of this contract to accept work coming from a "struck" shop or other shop unfair to organized labor.

Steam and Operating Engineers—Detroit, Mich.

AN AGREEMENT under which Local Union No. 5 of the International Union of Steam and Operating Engineers is working is of interest for its inclusion of some definitions of both the responsibilities and the rights of the workers. The agreement was signed on February 12, 1924, and provides for its renewal without alteration "unless notice has been given by either party one month before the 31st day of January, 1925." It is stipulated that a week's work shall consist of 48 hours, that a chief engineer shall receive \$55, and an assistant engineer \$50 a week, and that overtime shall be paid for at the rate of time and a half, and Sunday and holiday work at double time. It is also provided that whenever a plant employs more than one engineer, the man in charge shall have the title of chief engineer, and his responsibilities are thus defined and limited: "A chief engineer shall in all cases have full charge of all appliances used for heat, light, power, fire systems, engine and boiler rooms, and be held responsible for the same and nothing else."

It is further agreed that the engineers are to perform their duties faithfully and efficiently, that they are to be in their places in time to start up the machinery at the hour set by the employers, and that they are to keep their plant in proper working order. Moreover, if any engineer wishes to leave his position, he is to give one week's notice, both to his employer and to the business agent of the union, "so that the mutual interests of both parties to this agreement may be best conserved and maintained."

On their side the employers agree "to hire none but members in good standing in the above organization as engineers, assistant engineers, and all operators in and around their plant," and to submit to a limitation of their right to discharge.

No engineer complying with this agreement shall be discharged unless for the following reasons: Incompetency, drunkenness, negligence, dishonesty, disobedience, or disrespect to employer. In case of sickness or accident, any engineer may be relieved by a substitute on getting his employer's permission, and upon his recovery shall resume his position as usual.

In case of misunderstanding or trouble between the parties to the agreement, arbitration is to be resorted to, the work to be continued under the terms of the agreement pending a decision of the arbitra-

tors, which is to be binding on both sides. Finally, the international body undertakes to see that the agreement is respected, and to use its influence in promoting peace between employers and employees.

The International Union of Steam and Operating Engineers, party of the second part, pledges itself to promote the mutual interest of the parties of this agreement, and to continue the present amicable relations between employer and employee, to observe engine-room regulations, discipline such of its members as may be guilty of conduct unbecoming an engineer; to advertise the standing of said firms through the usual channels, as employing a union engineer, and to use the organization's good offices in behalf of the party of the first part in every reasonable manner.

Street-Railway Employees—Pomeroy, Ohio

AN INTERESTING example of cooperation between employees and employer is shown in the agreement made in December, 1924, for one year, by the Ohio River Railway & Power Co. and Division No. 684, Amalgamated Association of Street and Electric Railway Employees, of Pomeroy, Ohio. By the terms of this agreement "members of the association agree to cooperate with the company in support of extra man by laying off two days each month, providing the company will give to said extra man all extra work such as line-car, work-car, and freight-car work, that extra men may earn a living wage."

The company is to furnish each employee with a pass for himself and wife, good over all the lines of the company, said pass to be returned upon retirement from the service of the company or upon substantial proof of misuse of it.

The hours and wages are as follows:

A standard day shall be fixed at nine hours. Any time above nine hours shall constitute overtime: Provided, however, that if a run can not be adjusted so as to relieve an employee on the exact hour completing his nine hours, then no overtime shall be paid until the completion of said run, unless its completion required more than one hour beyond the standard day.

The wage scale for motormen and conductors shall be: To those of less than three months' service, 36 cents per hour. To those of three months' service and less than one year, 39 cents per hour. To those of one year's service or more, 41 cents per hour. Overtime shall be paid for at the rate of one and one-half times.

AWARDS AND DECISIONS

Railroads—Decisions of Railroad Labor Board

Baggagemen

IN DECISION No. 2993, February 19, 1925, the United States Railroad Labor Board considered a request of the Brotherhood of Railroad Trainmen that baggagemen be placed on all passenger trains of the Chicago, Indianapolis & Louisville Railway Co. The trainmen's agreement provided for rates for baggagemen as well as for brakemen and conductors, but the carrier had no baggagemen on its trains. Instead, it farmed its baggage to the express company. The

position of the carrier, with the opinion of the board denying the claim of the employees, follows:

Carrier's position.—All the trains of this carrier handle baggage, and they also handle express matter. Under the contract with the American Railway Express Co. the men employed by the express company for the purpose of handling express matter also handle baggage. These express messengers are paid directly by the express company, and under the contract the carrier pays a portion of their salaries to the express company. When any trains are operated which handle baggage but do not handle express matter, baggagemen are put on such trains for the purpose of handling such baggage. In such cases these baggagemen are employed by this carrier and paid the rates provided for in the contract of December 1, 1919, or the so-called national agreement.

There is nothing in the contract which requires the carrier to employ baggagemen on any of its trains. The rate for baggagemen was first incorporated in our trainmen's schedule on June 23, 1910, to cover runs on which no express was handled. These positions were then filled from the ranks of the trainmen, but when express was handled on these runs the baggage was handled by employees of the express company under a contract with the express company which said that employees performed this service in connection with their other duties for the express company. There are no runs on this carrier where the baggage is of sufficient volume to require the service of exclusive baggagemen.

There is nothing in the contract requiring the carrier to place baggagemen on any of its trains, nor requiring it to breach its contract with the express company in order to create new positions. The Railroad Labor Board has no jurisdiction or authority to enter an order herein requiring this carrier to breach its contract with the American Railway Express Co., neither has it any jurisdiction or authority to require the carrier to create new positions on its railroad.

Opinion.—The employees' request that baggagemen be placed on all passenger trains can not be sustained under the rules and practices in effect. There is no rule in the existing schedule with the Brotherhood of Railroad Trainmen requiring such action on the part of the carrier, and there is no evidence of the carrier's having attempted to change past practice for the purpose of reducing wages fixed by agreement between the interested parties or by any tribunal having competent jurisdiction.

Dining-Car Conductors

THE attention of the Railroad Labor Board was given to a controversy between the Brotherhood of Dining Car Conductors and the Chicago, Burlington & Quincy Railroad Co. in Decision No. 3082, effective March 15, 1925, relative to wages and changes in rules and working conditions. The board directed the incorporation of the following rules into the agreement between the two parties. The remaining rules were remanded for further conference.

RULE 2.—Rates of pay

There shall be no change in rates of pay or basis of compensation of dining-car conductors unless and until changed by mutual agreement or in conformity with the provisions of the transportation act, 1920.

RULE 3.—Basic month

(a) Two hundred and forty (240) hours' work shall constitute a basic month's service; deadhead hours properly authorized to be counted as service hours. Where a regular assignment is less than 240 hours' work per month, deduction will not be made from the monthly wage in consequence thereof.

(b) Service time shall be computed as continuous for each trip from the time required to report for duty until released, subject to the following deductions:

(c) The duly authorized representative of the carrier and of the organization, party hereto, shall agree upon and designate deductions to be made for sleep period en route, and for rest at release points, subject to any emergency conditions requiring a departure therefrom.

(d) When release from duty is less than one hour, no deduction will be made from the continuity of time.

(e) Conductors will be credited with all hours worked each month, and will be paid overtime at prorata hourly rates for all time worked each month in excess of 240 hours; time in excess of 270 hours in the recognized month shall be paid for at the rate of time and one-half.

Representation

THE Railroad Labor Board, in Decision No. 3153, March 19, 1925, rendered a decision against too frequent elections for the purpose of deciding the question of representation. In December, 1923, an election to determine who should be the authorized representatives of the clerical employees on the Union Pacific Railroad resulted in the selection of the Brotherhood of Railway Clerks by a vote of 1,773 out of 3,274 votes cast. January 20, 1925, the carrier advised the brotherhood of the receipt of a communication from the Clerical Employees' Association claiming to represent a majority of the following classes of employees:

Clerks; telephone and switchboard operators; office boys; messengers; train and engine crew callers; station helpers, and employees engaged in sorting way-bills and tickets, operating appliances or machines for perforating, addressing envelopes, and other analogous service.

The carrier further stated that the association requested a conference to negotiate an agreement and suggested that it be determined by ballot whether a majority of these classes desired to be represented by the association or the brotherhood, abrogated that part of the agreement covering the classes above named, and requested them to join in conducting an election in accordance with the principles contained in the Railroad Labor Board's decisions Nos. 218 and 220 and addenda thereto. This request was refused and the matter came before the Railroad Labor Board for consideration.

The positions of the employees and the carrier, with the opinion and decision of the Railroad Labor Board are given in the following extracts from the decision:

Employees' position.—There is no necessity for again submitting the question of representation to the employees at this time, as this question was determined December 29, 1923. The election held at that time was to definitely determine the representation question.

There is no good that can be accomplished by repeatedly holding representation elections. The representation question is being forced upon the employees by the carrier through their paid agents.

There has been no change in conditions since December 29, 1923, that warrants the carrier in questioning our right as a representative of the majority of the employees involved. The result of the election held in December, 1923, has not been protested by the carrier or the Clerical Employees' Association, but, to the contrary, the result was accepted by all parties at interest. We do not believe it is the intention of the transportation act to permit this carrier to continually raise the question of representation for the purpose of obstructing the functions of our organization.

Our organization is now the recognized representative of the majority of the employees and has an agreement with the carrier now in effect.

Carrier's position.—It is admitted that an election was conducted during December, 1923, for the purpose of deciding at that time the wishes of the classes of employees involved in this dispute in regard to representation. Conditions, however, since that time have materially changed. The Clerical Employees' Association officers have recently furnished evidence to the management showing that they are not only a duly organized body with constitution and by-laws adopted, but have approximately 1,200 dues-paying members, and additional applications for membership being received almost daily.

The position taken by the Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees' organization indicates that it is their contention that the election conducted in December, 1923, permanently

and forever settles the question of representation, which appears preposterous. Changed conditions and sentiment must be given consideration, and the classes of employees involved in this dispute should be permitted at this time to determine who they desire to represent them. It is, therefore, the management's contention that a ballot should be spread without delay.

Opinion.—Generally it is the opinion of the board that the only fair way to decide a dispute on the question of representation of employees is an election by secret ballot in the manner prescribed in Decisions Nos. 218 and 220 and addenda thereto. With this in mind, in deciding disputes as to whether or not there should be an election, the board has directed that elections be held upon a reasonable showing that the employees desire a change.

It appears that the Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees requested a revision of agreement in July, 1924, less than eight months after the representation question had been decided and negotiations had not been held when the carrier requested another election.

The board is of the opinion that there is no necessity for a representation election unless there is a reasonable presumption that a majority of the employees desire a change. The evidence in the present case does not create such presumption.

The board does not confirm the contention of the employees that an election once held definitely and for all time settles the question of representation.

Decision.—Under the facts and circumstances of this particular case, the Railroad Labor Board decides that the Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees is the duly authorized representative of the class of employees concerned and declines to order an election upon the evidence submitted.

Station Agents

THE Railroad Labor Board, in Decision No. 3107, March 12, 1925, answered in the negative the request of the American Railway Agents' Association to represent the agents at 52 stations, 42 of which are now included in the existing schedule of the Order of Railroad Telegraphers in their agreement with the Cleveland, Cincinnati, Chicago & St. Louis Railway Co.

The request of the American Railway Agents' Association is based on the contention that the agents whom they wish to represent are not required to do any telegraphing and that these positions should be designated as a separate class of subordinate officials and be eliminated from the telegraphers' schedule agreement.

The American Railway Agents' Association also requests the right to negotiate rate of pay and rules to govern working conditions of 31 other agents, 29 of whom by mutual agreement between the Order of Railroad Telegraphers and the carrier have been classified as officials under the terms of Ex parte No. 72 of the Interstate Commerce Commission, dated February 5, 1924, and 2 agents who are not included in the existing telegraphers' agreement by reason of dispute between the telegraphers' committee and the carrier as to whether such positions should be classified as official positions under the Interstate Commerce Commission ruling.

Opinion.—Information in possession of the Railroad Labor Board shows that it has been the common practice for many years, not only on the Cleveland, Cincinnati, Chicago & St. Louis Railway but on practically all carriers, for station agents to be classified with telegraphers and other positions in the telegraph department and that a large majority of the station agents actually performed some telegraph service or other service coming within the scope of the telegraphers' schedule agreement. The board must also recognize the fact that all agents that fall within the class of officials are not within its jurisdiction.

Switchmen

IN Decision No. 3083, March 6, 1925, the Railroad Labor Board settled a dispute between two unions as to which was entitled to make an agreement with the carrier.

The Alabama & Vicksburg Railway Co. had made an agreement with the Brotherhood of Railroad Trainmen December 10, 1919, covering conductors, trainmen, and yardmen, in which the two latter groups were represented by a single committee elected by them both. On May 28, 1924, a second ballot was taken to determine what organization represented a majority of the yard-service employees, embracing foremen, helpers, and switch tenders, the result indicating that a majority of these employees desired representation by the switchmen's union.

The Brotherhood of Railroad Trainmen was unwilling to cancel that part of its contract relating to yardmen, and the carrier refused to enter into a new contract without a ruling by the Railroad Labor Board, for the carrier desired to avoid any interruption to its operations and to remain in harmony with all its employees.

The Railroad Labor Board's decision was as follows:

Having determined by secret ballot, in which all yardmen participated, that a majority of said yardmen have chosen the Switchmen's Union of North America as their representative in future negotiation of rules to govern rates of pay and working conditions of yard foremen, helpers, and switch tenders, it becomes incumbent upon the carrier to serve such notice as is necessary under the Brotherhood of Railroad Trainmen's schedule of its intention to eliminate yardmen therefrom, and to negotiate an agreement with the Switchmen's Union of North America covering such yardmen.

Having reopened the schedule with the Brotherhood of Railroad Trainmen, the parties thereto should confer for the purpose of revising the agreement in such a manner as may be required by reason of the change in representation of yard foremen, helpers, and switch tenders heretofore included in the scope rule of the Brotherhood of Railroad Trainmen's agreement.

Telegraphers

THE dispute between the Pennsylvania Railroad and its employees in station, telegraph, and tower service as to which organization should represent the latter in their dealings with the carrier was decided by the Railroad Labor Board in its Decision No. 2781, January 17, 1925, in favor of the Order of Railroad Telegraphers.

Following this decision the parties were notified that the board would conduct a hearing, February 17, 1925, on the question of wages and rules governing working conditions. At this meeting only the representatives of the employees appeared.

March 1, 1925, in Decision No. 3003, the board promulgated rules to be incorporated in the schedule of rules and working conditions of the employees. These rules are the same as those promulgated in Decision Nos. 757, 2025, and 2374. The first two were published in the MONTHLY LABOR REVIEW, April, 1922, pages 121-124, and for April, 1924, page 105. The question of wages was reserved, to be decided later.

Clothing Industry—New York City

Pay for Legal Holidays

IN CASE No. 53, decided March 7, 1925, by the impartial chairman of the New York clothing industry, the union claimed that 11 examiners were entitled to pay for two legal holidays, in accordance with a rule in effect since 1918, by which members of Cutters' Local No. 4 receive pay for nine legal holidays including the two for which

pay was claimed. It was argued that since the examiners were members of that local, they were entitled to the same consideration as cutters. The firm's practice has been not to pay examiners for holidays when they were working in the same shops with tailors, but in this case the examiners were on a separate floor and were instructed not to work even though the tailors did.

The firm contended that the practice of paying examiners for legal holidays varied, that they had not been paid for holidays since the Fourth of July, 1923, and that they had not complained until the present time.

The chairman held that since there is an understanding in the market that members of the cutters' local receive pay for legal holidays, and "since for all practical purposes examiners are members of the cutters' group," the examiners should be paid for holidays.

Piece Rate for Buttonholes

IN CASE No. 46, decided February 14, 1925, the impartial chairman of the New York clothing industry set a piecework price for making buttonholes. The union asked for 7 cents, while the firm considered $5\frac{1}{2}$ cents a fair price, and in support of its contention exhibited coats from other houses, with the rates paid. The firm contended that 120 buttonholes would be a fair day's output while the union estimate was about 105.

The decision was as follows:

The impartial chairman does not claim to be an expert on these matters, but even a casual examination of the several coats submitted reveals the fact that the buttonholes on the Shapiro coat are better in workmanship. The variance of the probable output of the worker in question as estimated by the representative of the firm and the representative of the union is not very great. The impartial chairman therefore sets 6 cents as the piece rate for these buttonholes, this rate to be retroactive.

Work Sent to Nonunion Contractor

THE claim of the union in Case No. 57, before the impartial chairman of the New York clothing industry, decided March 25, 1925, was to the effect that work sent to a nonunion contractor in Newark should be removed and sent to a union shop and that workers in the shops regularly working for the firm should be compensated for work diverted from their shops. This demand was made after the firm had failed to heed the complaint made by the union to the merchants' exchange about the work sent out and, the union claimed, had sent a second lot to the contractor, whereupon the union ordered a stoppage of work in all shops of the firm.

The representative of the exchange emphasized the fact that the firm was at fault in sending work to a nonunion contractor and that no attempt to defend the action had ever been made. The firm claimed, however, that a second lot had not been sent and that the company did not know that the shop was nonunion. Furthermore, the firm had sustained considerable loss due to the stoppage and considered this a serious violation of the agreement which specifically forbids stoppages.

The decision of the impartial chairman was as follows:

The impartial chairman feels that in this case the arbitrary action of the one side may be balanced against the arbitrary action of the other side in assessing the measure of blame. It was clearly wrong of the firm to send work to a non-

registered, nonunion contractor, when the status of the contractor could so easily have been ascertained. Ignorance can be no excuse here, as the agreement between the manufacturers' exchange and the union is clear on this subject. On the other hand the impartial chairman can not but view with disfavor the action of the union in ordering a stoppage, when the agreement clearly provides that there shall be no stoppages, however great the provocation, but that whatever disputes arise shall be taken before the chairman. There was no need for direct action in this case, with its resultant wastefulness as regards both the workers' earnings and shop production, since the impartial machinery exists to provide an orderly adjustment of differences. In view of the losses already sustained by the firm, and since the union took the law into its own hands, the impartial chairman can not grant the request of the union to further penalize the firm.

Shirt Industry—Greater New York

VIOLATION of the agreement with the union was charged against three shirt companies in cases No. 60, February 16, 1925, No. 62 and No. 63, February 21, 1925, brought before the board of arbitration for this industry. These three companies had discharged all of their cutters—an act that was considered a lockout by the union. Two of these companies escaped from their agreement with the union by resigning from the association and moving their factories out of town and thus out of the jurisdiction of the board of arbitration. The third company (involved in case No. 60) maintained that it had resigned from the association, but inasmuch as the resignation had not been acted upon officially by the association, the board ruled that the agreement was binding until a member had officially resigned, and that the firm was obligated to reinstate its workers, and if any change in status was to be made the matter must be taken up through the proper channels provided for in the agreement.

Case No. 66, decided March 6, 1925, by the same board of arbitration, dealt with the charge made by the union that a shirt company gave work to a nonunion contractor in New York City. The Manufacturers' Association brought countercharges that the union called a stoppage of work in the factory of this firm. The representatives of the firm admitted that the action of the firm was wrong, but pointed out that the union instead of bringing the case to arbitration as provided for in the agreement unlawfully caused a stoppage in the factory.

The chairman of the board of arbitration noted that it was plainly evident that both parties had violated their agreement, and made the following ruling:

The board of arbitration considers that these violations of both parties occur too frequently of late to be condoned. On the part of the firm, there seems to have been a willful violation and the board believes that a heavy fine should be imposed for an act of this kind. But the action of the union in this case estops the board from imposing the punishment merited. The officials of the organization not only violated their own agreement, but the law of their union. If the officials of the union had settled this matter through the impartial machinery instead of taking the law into their own hands, then this firm could have been properly punished.

The board, however, desires to caution the firm that while it has escaped this time, that future violations of the agreement will meet with the proper penalty, and also to point out to it that it is only saved in this instance through the action of the other party to the agreement.

In respect to the stoppage, the workers have already been ordered to return to work.

EMPLOYMENT AND UNEMPLOYMENT

Employment and Earnings of Railroad Employees, February, 1924, and January and February, 1925

THE following tables show the number of employees and the earnings in various occupations among railroad employees in February, 1925, in comparison with employment and earnings in January, 1925, and February, 1924.

The figures are for Class I roads—that is, all roads having operating revenues of \$1,000,000 a year and over.

COMPARISON OF EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES IN FEBRUARY, 1925, WITH THOSE OF JANUARY, 1925, AND FEBRUARY, 1924

[From monthly reports of Interstate Commerce Commission. As data for only the more important occupations are shown separately, the group totals are not the sum of the items under the respective groups; the grand totals will be found on pp. 128 and 131]

Month and year	Professional, clerical, and general			Maintenance of way and structures		
	Clerks	Stenographers and typists	Total for group	Laborers (extra gang and work train)	Track and roadway section laborers	Total for group
<i>Number of employees at middle of month</i>						
February, 1924.....	169,017	25,184	282,740	40,701	171,444	335,449
January, 1925.....	166,632	25,067	280,630	37,180	169,728	330,420
February, 1925.....	166,819	25,190	281,174	38,810	169,338	329,983
<i>Total earnings</i>						
February, 1924.....	\$20,888,809	\$2,980,976	\$37,102,740	\$2,777,826	\$11,805,508	\$29,794,395
January, 1925.....	21,545,825	3,069,049	38,213,342	2,860,560	12,806,725	31,801,725
February, 1925.....	20,363,290	2,976,809	36,660,437	2,667,904	11,236,043	28,839,804
<i>Maintenance of equipment and stores</i>						
	Carmen	Machinists	Skilled trade helpers	Laborers (shops, engine houses, power plants, and stores)	Common laborers (shops, engine houses, power plants, and stores)	Total for group
<i>Number of employees at middle of month</i>						
February, 1924.....	120,969	65,123	120,780	48,904	60,933	548,700
January, 1925.....	119,993	62,975	119,473	47,193	62,117	542,905
February, 1925.....	119,343	63,149	119,482	46,479	61,411	541,057
<i>Total earnings</i>						
February, 1924.....	\$16,182,455	\$9,672,871	\$12,308,617	\$4,509,836	\$4,660,250	\$60,789,248
January, 1925.....	17,362,524	10,056,717	13,155,373	4,581,699	5,072,683	70,570,071
February, 1925.....	15,689,723	9,097,591	11,939,211	4,090,067	4,566,056	64,432,723

COMPARISON OF EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES IN FEBRUARY, 1925, WITH THOSE OF JANUARY, 1925, AND FEBRUARY, 1924—Contd.

Month and year	Transportation other than train and yard					Transportation (yard masters, switch tenders, and hostlers)
	Station agents	Telegraphers, telephoners, and towermen	Truckers (stations, warehouses, and platforms)	Crossing and bridge flagmen and gatemen	Total for group	
Number of employees at middle of month						
February, 1924.....	31,436	26,964	38,992	22,870	208,379	25,728
January, 1925.....	31,101	26,355	36,914	22,783	204,251	24,755
February, 1925.....	31,096	26,269	38,450	22,741	207,274	24,697
Total earnings						
February, 1924.....	\$4,554,836	\$3,722,196	\$3,461,148	\$1,696,042	\$24,049,636	\$4,410,860
January, 1925.....	4,835,409	3,931,885	3,409,845	1,708,821	24,962,126	4,572,815
February, 1925.....	4,463,215	3,553,720	3,303,070	1,682,816	23,586,098	4,311,084
Transportation, train and engine						
	Road conductors	Road brakemen and flagmen	Yard brakemen and yardmen	Road engineers and motormen	Road firemen and helpers	Total for group
Number of employees at middle of month						
February, 1924.....	37,602	77,596	55,064	45,760	47,879	336,033
January, 1925.....	36,771	75,544	54,307	44,238	46,184	328,941
February, 1925.....	36,426	74,424	53,905	43,636	45,477	324,699
Total earnings						
February, 1924.....	\$3,262,286	\$12,375,054	\$8,749,406	\$11,235,100	\$8,302,987	\$61,712,680
January, 1925.....	8,831,089	13,206,916	9,489,318	11,834,460	8,826,623	66,033,952
February, 1925.....	7,861,821	11,724,488	8,443,845	10,541,043	7,803,055	58,807,423

Extent of Operation of Bituminous Coal Mines, February 28 to March 28, 1925

CONTINUING a series of tables which have appeared in previous numbers of the MONTHLY LABOR REVIEW, the accompanying table shows for a large number of coal mines in the bituminous fields the number of mines closed the entire week and the number working certain classified hours per week from February 28 to March 28, 1925. The number of mines reporting varied each week, and the figures are not given as being a complete presentation of all mines, but are believed fairly to represent the conditions as to regularity of work in the bituminous mines of the country. The mines included in this report ordinarily represent 55 to 60 per cent of the total output of bituminous coal. The figures are based on data furnished to the Bureau of Labor Statistics by the United States Geological Survey.

WORKING TIME IN BITUMINOUS COAL MINES IN THE UNITED STATES BY WEEKS,
FEBRUARY 28 TO MARCH 28, 1925

[The mines included ordinarily represent from 55 to 60 per cent of the total output. Prepared by the Bureau of Labor Statistics from data furnished by the United States Geological Survey]

Week ending—	Number of mines reporting	Mines closed entire week		Mines working—														Full time—48 hours or more	
				Less than 8 hours		8 and under 16 hours		16 and under 24 hours		24 and under 32 hours		32 and under 40 hours		40 and under 48 hours					
		No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent		
1925																			
Feb. 28	2,045	717	35.1	25	1.2	174	8.5	249	12.2	303	14.8	238	11.6	174	8.5	165	8.1		
Mar. 7	2,044	730	35.7	17	.8	92	4.5	213	10.4	281	13.7	269	13.2	227	11.1	215	10.5		
Mar. 14	2,014	722	35.8	33	1.6	114	5.7	273	13.6	299	14.8	224	11.1	165	8.2	184	9.1		
Mar. 21	1,953	783	40.1	19	1.0	136	7.0	235	12.0	286	14.6	198	10.1	160	8.2	136	7.0		
Mar. 28	1,890	768	40.6	29	1.5	140	7.4	227	12.0	270	14.3	161	8.5	145	7.7	150	7.9		

Employment in Selected Industries in March, 1925

EMPLOYMENT in manufacturing industries in the United States increased 1 per cent in March as compared with February, the aggregate earnings of employees increased 1.8 per cent, and per capita earnings increased 0.9 per cent.

These unweighted figures, presented by the United States Department of Labor through the Bureau of Labor Statistics, are based on reports from 8,972 establishments in 52 industries, covering 2,808,019 employees whose total earnings during one week in March were \$75,422,103. The same establishments in February reported 2,780,606 employees and total pay rolls of \$74,059,653.

Five of the nine geographic divisions show increases in employment in March and eight show increases in pay-roll totals. The increases in employment were from 2.5 per cent in the East North Central States to 0.3 per cent in the New England States. The decreases in employment were from 1.2 per cent each in the West South Central States and in the Pacific States to 0.2 per cent in the East South Central States. The increases in pay-roll totals ranged from 3 per cent in the South Atlantic States to less than one-tenth of 1 per cent in the East South Central States, and the one decrease, which occurred in the West North Central States, was 0.1 per cent only.

Comparison of Employment in February and March, 1925

THERE were gains in employment in March in 9 of the 12 groups of industries, 4 of the 9 groups showing gains of 4 per cent or over. These 4 groups, made up largely of industries having pronounced seasonal proclivities, were chemicals; stone, clay, and glass products; metal products, other than iron and steel; and vehicles for land transportation. The food group lost over 3 per cent of its employees, while the lumber and leather groups show losses of much less than 1 per cent each.

The food group alone of the 12 groups of industries failed to show a gain in the aggregate earnings of employees, the decrease being over 2 per cent. The 4 groups showing the largest gains in employees, as a whole, show even larger gains in pay-roll totals.

Thirty-two of the 52 separate industries show gains in employment in March, the greatest, for the most part, being purely seasonal ones, such as 40 per cent in the fertilizer industry, in which the high point of the shipping season is regularly reached in March; 9 per cent in the brick, tile, and terra cotta industry, which in March begins its upward movement after the inactive winter season; and 7.2 per cent, each, in the automobile and the carriage industries. Other gains of considerable size were 7.2 per cent in cane-sugar refining; 4.5 per cent in stamped ware; 4 per cent in cement, and 3.5 per cent each in agricultural implements and in ice cream.

One-half of the 20 losses in employment in individual industries in March were decidedly less than 1 per cent. The industries showing more marked decreases in employment were chewing and smoking tobacco, 6.2 per cent; slaughtering and meat packing, 5.6 per cent; flour, 5.3 per cent; confectionery, woolen goods, and rubber boots and shoes, from 2.7 to 2 per cent; and men's clothing, baking, paper boxes, and sawmills, from 1.8 to 1.3 per cent.

Forty-one of the 52 industries show increased pay-roll totals in March, fertilizers leading with an increase of over 38 per cent. Nine industries show gains in employees' earnings of from 10.7 per cent to 4.8 per cent. These industries are sugar, carriages, brick, automobiles, stamped ware, ice cream, millinery, cement, and agricultural implements.

Of the 11 industries showing decreased pay-roll totals, only 5 show decreases of over 1.1 per cent, and these 5 naturally are the industries showing the largest decreases in employment.

For convenient reference the latest figures available relating to all employees, excluding executives and officials, on Class I railroads, drawn from Interstate Commerce Commission reports, are given at the foot of the first and second tables.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN FEBRUARY AND MARCH, 1925

Industry	Estab- lish- ments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		February, 1925	March, 1925		February, 1925	March, 1925	
Food and kindred products.....	1,054	189,777	183,802	-3.1	\$4,684,068	\$4,579,509	-2.2
Slaughtering and meat packing.....	83	83,834	79,136	-5.6	2,081,358	1,942,593	-6.7
Confectionery.....	261	30,930	30,104	-2.7	571,570	572,207	+0.1
Ice cream.....	99	6,211	6,430	+3.5	205,249	217,906	+6.2
Flour.....	291	13,632	12,910	-5.3	357,770	334,442	-6.5
Baking.....	307	45,450	44,806	-1.4	1,170,759	1,183,288	+1.1
Sugar refining, cane.....	13	9,720	10,416	+7.2	297,362	329,073	+10.7
Textiles and their products.....	1,754	581,117	581,568	+0.1	11,854,223	11,945,444	+0.8
Cotton goods.....	341	204,410	203,571	-0.4	3,396,024	3,421,263	+0.7
Hosiery and knit goods.....	258	80,075	81,581	+1.9	1,470,329	1,519,058	+3.3
Silk goods.....	200	55,937	56,985	+1.9	1,210,182	1,254,489	+3.7
Woolen and worsted goods.....	190	73,036	71,423	-2.2	1,720,482	1,639,547	-4.7
Carpets and rugs.....	31	23,066	23,253	+0.8	626,021	635,516	+1.5
Dyeing and finishing textiles.....	91	30,170	30,481	+1.0	753,005	768,202	+2.0
Clothing, men's.....	281	60,157	59,078	-1.8	1,514,053	1,498,051	-1.1
Shirts and collars.....	85	20,892	21,094	+1.0	330,894	343,830	+3.9
Clothing, women's.....	190	19,063	19,497	+2.3	521,207	535,017	+2.6
Millinery and lace goods.....	87	14,311	14,605	+2.1	312,026	330,471	+5.9
Iron and steel and their prod- ucts.....	1,551	615,267	618,692	+0.6	18,315,603	18,442,953	+0.7
Iron and steel.....	217	290,279	291,709	+0.5	8,860,016	8,895,099	+0.4
Structural ironwork.....	141	18,501	18,589	+0.5	524,054	527,626	+0.7
Foundry and machine-shop products.....	733	187,978	189,801	+1.0	5,522,892	5,616,441	+1.7
Hardware.....	59	34,564	34,769	+0.6	874,303	878,244	+0.5
Machine tools.....	183	25,588	25,401	-0.7	765,029	756,316	-1.1

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN FEBRUARY AND MARCH, 1925—Continued

Industry	Estab- lish- ments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		February, 1925	March, 1925		February, 1925	March, 1925	
Iron and steel and their products—Continued.							
Steam fittings and steam and hot-water heating apparatus	133	41,945	41,963	+0.1	\$1,295,603	\$1,290,369	-0.2
Stoves	85	16,412	16,460	+0.3	473,706	479,558	+1.4
Lumber and its products	1,066	203,632	202,323	-0.6	4,455,895	4,519,017	+1.4
Lumber, sawmills	416	110,911	109,522	-1.3	2,265,282	2,315,621	+2.2
Lumber, millwork	260	33,313	33,430	+0.4	801,749	801,196	-0.1
Furniture	390	59,408	59,371	-0.1	1,388,864	1,402,200	+1.0
Leather and its products	356	122,931	122,852	-0.1	2,869,735	2,877,819	+0.3
Leather	122	26,705	26,666	-0.1	690,956	699,643	+0.2
Boots and shoes	234	96,226	96,186	-0.1	2,178,779	2,188,176	+0.4
Paper and printing	800	151,737	153,210	+1.0	4,749,306	4,817,951	+1.4
Paper and pulp	200	52,216	53,563	+2.6	1,402,667	1,434,821	+2.3
Paper boxes	153	16,449	16,211	-1.4	351,164	355,405	+1.2
Printing, book and job	245	40,169	40,050	-0.3	1,331,585	1,354,546	+1.7
Printing, newspaper	202	42,903	43,386	+1.1	1,663,890	1,673,179	+0.6
Chemicals and allied products	246	78,204	81,571	+4.3	2,281,815	2,399,768	+5.2
Chemicals	96	23,294	23,550	+1.1	599,103	610,692	+1.9
Fertilizers	94	7,954	11,162	+40.3	140,035	193,358	+38.1
Petroleum refining	56	46,956	46,859	-0.2	1,542,677	1,595,718	+3.4
Stone, clay, and glass products	601	100,185	104,196	+4.0	2,663,232	2,769,896	+4.0
Cement	79	21,664	22,522	+4.0	625,105	657,141	+5.1
Brick, tile, and terra cotta	338	27,857	30,372	+9.0	721,768	784,966	+8.8
Pottery	53	12,587	12,548	-0.3	332,636	334,938	+0.7
Glass	131	38,077	38,754	+1.8	983,723	992,851	+0.9
Metal products, other than iron and steel	45	14,907	15,581	+4.5	360,909	387,133	+7.3
Stamped and enameled ware	45	14,907	15,581	+4.5	360,909	387,133	+7.3
Tobacco products	189	42,981	42,987	+0.1	712,982	716,105	+0.4
Chewing and smoking tobacco and snuff	34	9,370	8,792	-6.2	147,750	136,668	-7.5
Cigars and cigarettes	155	33,611	34,195	+1.7	565,232	579,437	+2.5
Vehicles for land transportation	918	448,813	468,762	+4.4	14,548,222	15,326,233	+5.3
Automobiles	214	269,280	288,641	+7.2	9,123,519	9,868,306	+8.2
Carriages and wagons	42	2,284	2,449	+7.2	57,128	63,039	+10.3
Car building and repairing, electric-railroad	179	16,030	16,448	+2.6	485,124	502,630	+3.6
Car building and repairing, steam-railroad	483	161,219	161,224	+0.1	4,882,451	4,892,258	+0.2
Miscellaneous industries	392	231,055	232,475	+0.6	6,563,663	6,639,275	+1.2
Agricultural implements	97	24,542	25,401	+3.5	678,858	711,513	+4.8
Electrical machinery, apparatus, and supplies	131	97,126	96,610	-0.5	2,736,135	2,724,450	-0.4
Pianos and organs	39	7,960	7,925	-0.4	225,170	229,609	+2.0
Rubber boots and shoes	11	18,181	17,809	-2.0	439,186	424,846	-3.3
Automobile tires	72	55,029	55,959	+1.7	1,680,602	1,725,405	+2.7
Shipbuilding, steel	42	28,217	28,771	+2.0	803,712	823,452	+2.5
Total	8,972	2,780,606	2,808,019	+1.0	74,059,653	75,422,103	+1.8

Recapitulation by Geographic Divisions

GEOGRAPHIC DIVISION							
New England	1,259	416,806	418,175	+0.3	10,096,822	10,109,825	+0.1
Middle Atlantic	2,271	835,788	839,586	+0.5	23,171,555	23,624,597	+2.0
East North Central	2,367	862,592	884,137	+2.5	25,994,142	26,711,423	+2.8
West North Central	801	140,759	140,107	-0.5	3,467,229	3,463,173	-0.1
South Atlantic	918	233,354	236,671	+1.4	4,444,257	4,579,428	+3.0
East South Central	383	95,035	94,857	-0.2	1,848,003	1,848,037	+0.1
West South Central	316	71,016	70,131	-1.2	1,541,198	1,509,079	-2.1
Mountain	133	23,248	23,524	+1.2	659,952	671,224	+1.7
Pacific	524	102,008	100,831	-1.2	2,836,495	2,845,317	+0.3
Total	8,972	2,780,606	2,808,019	+1.0	74,059,653	75,422,103	+1.8

Employment on Class I Railroads

January 15, 1925	1,711,902		\$233,154,031	
February 15, 1925	1,708,884	-0.2	\$216,637,569	-8.3

¹ Less than one-tenth of 1 per cent.² Amount of pay roll for one month.

Comparison of Employment in March, 1925, and March, 1924

REPORTS from 7,506 establishments are available for a comparison of employment and employees' earnings between March, 1925, and March, 1924. These reports, from identical establishments in the two years, show a decrease of 4 per cent in employment, a decrease of 3.1 per cent in the aggregate earnings of employees, and an increase of 1 per cent in per capita earnings.

Two of the nine geographic divisions show increases both in employment and in pay-roll totals in the 12-month period. These are the South Atlantic States and the West South Central States. In each case the increase in pay-roll totals is considerably greater than the increase in employment. The East South Central States show an increase in pay-roll totals, but they also show a decrease in employment. The remaining six divisions show decreases in both items. The Pacific States show a decrease of 7.7 per cent in employment and of 7.2 per cent in pay-roll totals, and the East North Central States show decreases of 6.2 per cent and 5.6 in the two items. The decreases in the four remaining divisions were considerably smaller.

As in February, each of the 12 groups of industries, except the paper and printing group, reported fewer employees in March, 1925, than in March, 1924. The greatest decreases in employment were 7.8 per cent in the vehicles group of industries and 5.8 per cent in both the food and iron and steel groups, while the smallest decrease was 0.9 per cent in the tobacco group. The paper and printing group of industries shows a gain in March, 1925, over March, 1924, of 1.1 per cent in employment, which is slightly more than the gain reported last month.

The paper and printing group, as in the last report, shows also a gain in employees' earnings in the 12-month period, while the textile group also shows increased pay-roll totals in March, 1925, instead of a decrease as in February. The remaining 10 groups all continue to show smaller pay-roll totals.

Twelve of the 52 separate industries gained in employment in March, 1925, as compared with the same month in 1924, while 18 industries gained in the aggregate earnings of employees. Automobile tires gained 15.4 per cent in employment and 16.2 per cent in pay-roll totals; dyeing and finishing textiles, 8.6 per cent and 18.3 per cent, respectively, in the two items; and silk goods, 6 per cent and 12.3 per cent, respectively, in the two items. Rubber boots and shoes, steam railroad car building and repairing, furniture, the printing industries, and confectionery also show both improved employment and earnings, although in a lesser degree.

The carriage and wagon industry, chewing and smoking tobacco and snuff, automobiles, machine tools, and electrical machinery show the largest declines in this comparison over a 12-month period, the losses in employment being from 11 per cent to over 14 per cent and the losses in aggregate earnings being from 8.1 per cent to 15.9 per cent. Eighteen other industries show decreased employment of over 4 per cent, and 13 other industries show decreased pay-roll totals of over 4 per cent. Twelve of the 18 industries and 12 of the 13 industries indicated above are identical.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN MARCH, 1924, AND MARCH, 1925

Industry	Estab- lish- ments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		March, 1924	March, 1925		March, 1924	March, 1925	
Food and kindred products	826	172,645	162,653	-5.8	\$4,294,820	\$4,087,847	-4.8
Slaughtering and meat packing.....	82	86,154	78,625	-8.7	2,114,529	1,929,372	-8.8
Confectionery.....	123	16,693	16,750	+0.3	314,666	320,606	+1.9
Ice cream.....	73	4,692	4,595	-2.1	148,037	147,296	-0.5
Flour.....	265	12,432	12,030	-3.2	325,637	313,069	-3.9
Baking.....	272	42,888	41,078	-4.2	1,065,756	1,068,472	-1.6
Sugar refining, cane.....	11	9,786	9,575	-2.2	306,195	309,032	+0.9
Textiles and their products	1,409	513,882	507,991	-1.1	10,867,942	10,572,540	+2.0
Cotton goods.....	290	179,337	176,751	-1.4	2,975,182	2,983,835	+0.3
Hosiery and knit goods.....	201	69,765	68,610	-1.7	1,257,594	1,313,265	+4.4
Silk goods.....	185	50,003	52,983	+6.0	1,039,378	1,166,800	+12.3
Woolen and worsted goods.....	158	65,461	63,406	-3.1	1,509,332	1,460,000	-3.3
Carpets and rugs.....	19	20,840	20,212	-3.0	599,433	542,874	-9.4
Dyeing and finishing textiles.....	71	26,058	28,286	+8.6	606,724	718,048	+18.3
Clothing, men's.....	196	53,432	50,637	-5.2	1,344,538	1,338,419	-0.5
Shirts and collars.....	80	21,741	20,456	-5.9	338,920	333,972	-1.5
Clothing, women's.....	143	15,199	14,901	-2.0	422,204	440,404	+4.3
Millinery and lace goods.....	66	12,046	11,749	-2.5	274,637	274,923	+0.1
Iron and steel and their products	1,320	562,792	530,026	-5.8	16,796,259	15,844,910	-5.7
Iron and steel.....	178	263,153	249,515	-5.2	8,133,525	7,625,389	-6.2
Structural ironwork.....	131	18,012	17,216	-4.4	495,272	488,567	-1.4
Foundry and machine-shop products.....	593	179,870	168,742	-6.2	5,227,023	5,030,546	-3.8
Hardware.....	47	29,115	27,050	-7.1	737,204	668,337	-9.3
Machine tools.....	168	24,156	21,405	-11.4	702,502	630,948	-10.2
Steam fittings and steam and hot-water heating apparatus.....	119	31,316	29,918	-4.5	979,891	931,214	-5.0
Stoves.....	84	17,170	16,180	-5.8	520,842	469,909	-9.8
Lumber and its products	983	192,292	188,935	-1.7	4,272,189	4,218,671	-1.3
Lumber, sawmills.....	389	107,134	103,100	-3.8	2,270,517	2,184,536	-4.0
Lumber, millwork.....	245	32,317	31,689	-1.9	781,857	758,534	-3.0
Furniture.....	349	52,841	54,146	+2.5	1,213,815	1,275,601	+5.1
Leather and its products	308	117,004	114,730	-1.9	2,706,807	2,697,256	-0.4
Leather.....	112	26,095	25,701	-1.5	672,522	664,559	-1.2
Boots and shoes.....	196	90,909	89,029	-2.1	2,034,285	2,032,697	-0.1
Paper and printing	689	127,713	129,162	+1.1	3,967,623	4,057,771	+2.3
Paper and pulp.....	141	43,645	44,728	+2.5	1,183,288	1,197,613	+1.2
Paper boxes.....	147	15,492	14,841	-4.2	329,693	319,244	-3.2
Printing, book and job.....	224	30,945	31,150	+0.7	1,026,507	1,058,550	+3.1
Printing, newspaper.....	177	37,631	38,443	+2.2	1,428,135	1,482,364	+3.8
Chemicals and allied products	186	63,574	60,415	-5.0	1,826,328	1,777,450	-2.7
Chemicals.....	71	17,797	17,625	-1.0	478,140	478,974	+0.2
Fertilizers.....	65	8,291	8,590	+3.6	154,029	153,956	(1)
Petroleum refining.....	50	37,486	34,200	-8.8	1,194,159	1,144,520	-4.2
Stone, clay, and glass products	528	90,223	85,548	-5.2	2,387,353	2,265,605	-5.1
Cement.....	65	17,788	16,246	-8.7	506,078	471,878	-6.8
Brick, tile, and terra cotta.....	304	26,160	25,204	-3.7	673,121	645,384	-4.1
Pottery.....	41	10,181	9,730	-4.4	286,780	265,939	-7.3
Glass.....	118	36,094	34,368	-4.8	921,374	882,404	-4.2
Metal products, other than iron and steel	38	14,329	13,553	-5.4	359,095	338,475	-5.7
Stamped and enameled ware.....	38	14,329	13,553	-5.4	359,095	338,475	-5.7
Tobacco products	172	36,708	36,370	-0.9	664,477	622,564	-6.3
Chewing and smoking tobacco and snuff.....	31	7,749	6,723	-13.2	128,428	107,973	-15.9
Cigars and cigarettes.....	141	28,959	29,647	+2.4	536,049	514,591	-4.0
Vehicles for land transportation	680	449,529	414,412	-7.8	14,477,353	13,669,486	-5.6
Automobiles.....	172	303,414	264,228	-12.9	10,234,414	9,106,976	-11.0
Carriages and wagons.....	41	2,823	2,425	-14.1	68,040	62,497	-8.1
Car buildings and repairing, electric-railroad.....	166	16,037	16,001	-0.2	477,354	489,770	+2.6
Car building and repairing, steam-railroad.....	301	127,255	131,758	+3.5	3,697,545	4,009,243	+8.4

¹ Less than one-tenth of 1 per cent.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN MARCH, 1924, AND MARCH, 1925—Continued

Industry	Establishments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		March, 1924	March, 1925		March, 1924	March, 1925	
Miscellaneous industries.....	367	226,350	220,338	-2.7	\$6,429,528	\$6,306,343	-1.9
Agricultural implements.....	91	24,511	24,360	-0.6	677,571	685,702	+1.2
Electrical machinery, apparatus, and supplies.....	124	103,913	92,491	-11.0	2,950,832	2,620,435	-11.2
Pianos and organs.....	34	8,415	7,718	-8.3	242,422	223,973	-7.6
Rubber boots and shoes.....	10	16,712	17,537	+4.9	384,277	418,220	+8.8
Automobile tires.....	69	45,834	52,896	+15.4	1,408,475	1,636,851	+16.2
Shipbuilding, steel.....	39	26,965	25,336	-6.0	765,951	721,162	-5.8
Total.....	7,506	2,567,041	2,464,183	-4.0	68,549,774	66,457,918	-3.1

Recapitulation by Geographic Divisions

GEOGRAPHIC DIVISION							
New England.....	1,001	380,848	367,242	-3.6	\$9,097,922	\$8,877,188	-2.4
Middle Atlantic.....	1,908	748,450	724,037	-3.3	20,760,529	20,372,149	-1.9
East North Central.....	2,082	874,175	820,195	-6.2	26,371,949	24,885,531	-5.6
West North Central.....	628	117,883	113,955	-3.3	2,850,240	2,789,070	-2.1
South Atlantic.....	782	194,037	194,674	+0.3	3,461,872	3,658,359	+5.7
East South Central.....	284	70,972	70,907	-0.1	1,307,107	1,351,810	+3.4
West South Central.....	264	62,750	63,432	+1.1	1,385,614	1,425,290	+2.9
Mountain.....	110	20,849	20,044	-3.9	596,558	575,650	-3.5
Pacific.....	447	97,077	89,647	-7.7	2,717,983	2,522,871	-7.2
Total.....	7,506	2,567,041	2,464,183	-4.0	68,549,774	66,457,918	-3.1

Employment on Class I Railroads

February 15, 1924.....		1,737,029		¹ \$223,859,559	
February 15, 1925.....		1,708,884	-1.6	¹ 216,637,569	-3.2

¹ Amount of pay roll for one month.

Per Capita Earnings

PER CAPITA earnings increased in March, 1925, as compared with February in 36 of the 52 separate industries here considered and decreased in the remaining 16 industries.

The increases and the decreases in this monthly comparison were all much smaller than frequently is the case. The greatest increases were in the millinery and lace goods, petroleum refining, sawmill, and cane sugar refining industries and ranged from 3.8 per cent to 3.3 per cent. The greatest decrease in per capita earnings was 2.5 per cent in the woolen and worsted-goods industry.

Comparing per capita earnings in March, 1925, with such earnings in March, 1924, increases are shown in 34 industries and decreases in 17 industries, while the per capita earnings in the slaughtering and meat-packing industry were unchanged.

The dyeing and finishing textiles industry shows an increase of 9.1 per cent in per capita earnings in the 12-month period, followed by carriages with an increase of 6.9 per cent, women's clothing with an increase of 6.4 per cent, hosiery and knit goods with an increase of 6.2 per cent, silk goods with an increase of 5.9 per cent, petroleum refining with an increase of 5.1 per cent, and men's clothing with an increase of 5 per cent. The carpet industry shows a loss of 6.6 per cent in per capita earnings in March, 1925, as compared with the same month in 1924, the cigar industry a loss of 6.2 per cent, and the stove industry a loss of 4.3 per cent.

COMPARISON OF PER CAPITA EARNINGS MARCH, 1925, WITH FEBRUARY, 1925, AND MARCH, 1924, BY INDUSTRIES

Industry	Per cent of change March, 1925, compared with—		Industry	Per cent of change March, 1925, compared with—	
	February, 1925	March, 1924		February, 1925	March, 1924
Millinery and lace goods.....	+3.8	+2.6	Carpets and rugs.....	+0.7	-0.6
Petroleum refining.....	+3.7	+5.1	Foundry and machine-shop products.....	+0.7	+2.6
Lumber, sawmills.....	+3.5	-0.3	Boots and shoes.....	+0.5	+2.0
Sugar refining, cane.....	+3.3	+3.1	Shipbuilding, steel.....	+0.5	+0.2
Carriages and wagons.....	+2.9	+6.9	Clothing, women's.....	+0.4	+6.4
Confectionery.....	+2.9	+1.5	Car building and repairing, steam-railroad.....	+0.2	+4.7
Shirts and collars.....	+2.9	+4.7	Structural ironwork.....	+0.2	+3.2
Paper boxes.....	+2.7	+1.1	Electrical machinery, apparatus, and supplies.....	+0.1	-0.2
Stamped and enameled ware.....	+2.6	-0.4	Leather..... ⁽¹⁾		+0.3
Baking.....	+2.5	+2.7	Iron and steel.....	-0.1	-1.1
Ice cream.....	+2.5	+1.6	Brick, tile, and terra cotta.....	-0.2	-0.5
Pianos and organs.....	+2.4	+0.7	Hardware.....	-0.2	-2.4
Printing, book and job.....	+2.0	+2.4	Paper and pulp.....	-0.3	-1.2
Silk goods.....	+1.8	+5.9	Lumber, millwork.....	-0.4	-1.0
Hosiery and knit goods.....	+1.4	+6.2	Machine tools.....	-0.4	+1.4
Agricultural implements.....	+1.3	+1.8	Steam fittings and steam and hot-water heating apparatus.....	-0.4	-0.5
Cotton goods.....	+1.2	+1.7	Printing, newspaper.....	-0.6	+1.6
Cement.....	+1.1	+2.1	Glass.....	-0.9	+0.6
Car building and repairing, electric-railroad.....	+1.0	+2.8	Slaughtering and meat packing.....	-1.1	⁽²⁾
Dyeing and finishing textiles.....	+1.0	+9.1	Rubber boots and shoes.....	-1.2	+3.7
Furniture.....	+1.0	+2.6	Flour.....	-1.3	-0.6
Pottery.....	+1.0	-3.0	Chewing and smoking tobacco and snuff.....	-1.5	-3.1
Automobiles.....	+0.9	+2.2	Fertilizers.....	-1.6	-3.6
Automobile tires.....	+0.9	+0.7	Woolen and worsted goods.....	-2.5	-0.1
Stoves.....	+0.9	-4.3			
Chemicals.....	+0.8	+1.2			
Cigars and cigarettes.....	+0.8	-6.2			
Clothing, men's.....	+0.8	+5.0			

¹ Less than one-tenth of 1 per cent.² No change.

Comparing per capita earnings in the nine geographic divisions for March, 1925, with those for February, 1925, and also with those for March, 1924, only one decrease is found, that being a very small one (0.2 per cent) in the comparison with February, 1925, for the New England States. The increases in the monthly comparison for the remaining eight divisions ranged from 3.1 per cent in the West South Central States to 0.2 per cent in the East South Central States.

The increases in the comparison between March, 1925, and the same month of 1924 ranged from 5.3 per cent in the South Atlantic States to 0.4 per cent in the Mountain States.

The total increases for all divisions combined in both the monthly and yearly comparisons were nearly the same, being 0.9 per cent in the monthly comparison and 1 per cent in the comparison over a year's interval.

COMPARISON OF PER CAPITA EARNINGS MARCH, 1925, WITH FEBRUARY, 1925, AND MARCH, 1924, BY GEOGRAPHIC DIVISIONS

Geographic division	Per cent of change March, 1925, compared with—	
	February, 1925	March, 1924
West South Central.....	+3.1	+1.8
South Atlantic.....	+1.6	+5.3
Middle Atlantic.....	+1.5	+1.4
Pacific.....	+1.5	+0.5
Mountain.....	+0.5	+0.4
West North Central.....	+0.4	+1.2
East North Central.....	+0.3	+0.6
East South Central.....	+0.2	+3.5
New England.....	-0.2	+1.2
Total.....	+0.9	+1.0

Time and Capacity Operation

REPORTS in percentage terms from 6,722 establishments in March show no changes in the average per cent of full-time operation and the average per cent of full-capacity operation as compared with February. The establishments in operation were employing an average of 83 per cent of a full normal force of employees and these employees were working an average of 93 per cent of full time.

One per cent of the reporting establishments were idle, 69 per cent were operating on a full-time schedule, and 30 per cent on a part-time schedule, while 42 per cent of the establishments had a full normal force of employees and 57 per cent were operating with a reduced force.

Over 2,100,000 employees are represented in the following tables, and of these nearly 1,500,000 were working on a full-time schedule and nearly 625,000 on a part-time schedule.

FULL AND PART TIME AND FULL AND PART CAPACITY OPERATION IN MANUFACTURING ESTABLISHMENTS IN MARCH, 1925

Industry	Establishments reporting		Per cent of establishments operating—		Average per cent of full time operated in establishments operating	Per cent of establishments operating—		Average per cent of full capacity operated in establishments operating
	Total number	Per cent idle	Full time	Part time		Full capacity	Part capacity	
Food and kindred products	779	1	55	45	84	34	65	79
Slaughtering and meat packing	40		43	58	87	35	65	79
Confectionery	201		52	48	84	15	84	72
Ice cream	63		81	19	95	6	94	75
Flour	249	1	28	71	69	37	63	77
Baking	218		83	17	96	55	45	88
Sugar refining, cane	8		75	25	91	63	38	95
Textiles and their products	1,241	1	78	21	96	50	49	87
Cotton goods	300	3	80	17	97	64	33	94
Hosiery and knit goods	153	1	73	27	97	46	53	86
Silk goods	145	1	83	17	98	41	59	85
Woolen and worsted goods	161	1	75	25	95	45	55	85
Carpets and rugs	22		91	9	99	45	55	82
Dyeing and finishing textiles	93		66	34	94	42	58	82
Clothing, men's	179	1	79	21	94	49	50	8
Shirts and collars	44		82	18	97	52	48	83
Clothing, women's	98		84	16	97	52	48	86
Millinery and lace goods	46		70	30	90	30	70	79
Iron and steel and their products	1,230	1	65	34	92	23	76	74
Iron and steel	171	1	57	42	89	27	71	81
Structural ironwork	105		76	24	94	20	80	75
Foundry and machine-shop products	590	1	65	34	93	21	78	73
Hardware	50		64	36	96	34	66	85
Machine tools	152	1	74	25	95	7	92	54
Steam fittings and steam and hot-water heating apparatus	97		73	27	95	42	58	85
Stoves	65	5	40	55	84	26	69	79
Lumber and its products	871	1	71	28	95	54	45	89
Lumber, sawmills	347	2	67	31	94	65	33	92
Lumber, millwork	196	1	74	26	96	52	48	89
Furniture	328		73	27	96	44	56	87
Leather and its products	263		68	31	92	36	64	81
Leather	97		85	15	96	32	68	76
Boots and shoes	166	1	59	40	90	39	61	84
Paper and printing	516	1	76	23	95	62	37	91
Paper and pulp	148	2	62	36	92	58	40	92
Paper boxes	91		60	40	92	36	64	84
Printing, book and job	162		81	19	97	57	43	89
Printing, newspaper	115		100		100	96	4	99

FULL AND PART TIME AND FULL AND PART CAPACITY OPERATION IN MANUFACTURING ESTABLISHMENTS IN MARCH, 1925—Continued

Industry	Establishments reporting		Per cent of establishments operating—		Average per cent of full time operated in establishments operating	Per cent of establishments operating—		Average per cent of full capacity operated in establishments operating
	Total number	Per cent idle	Full time	Part time		Full capacity	Part capacity	
Chemicals and allied products.....	199	1	85	15	97	47	52	86
Chemicals.....	71		79	21	95	55	45	84
Fertilizers.....	87	1	84	15	98	34	64	84
Petroleum refining.....	41		98	2	100	61	39	96
Stone, clay, and glass products....	471	4	62	34	89	44	52	80
Cement.....	64	5	78	17	96	56	39	96
Brick, tile, and terra cotta.....	246	6	57	37	87	43	51	81
Pottery.....	44		41	59	88	41	59	87
Glass.....	117	2	71	27	92	38	61	81
Metal products other than iron and steel.....	30		77	23	96	23	77	74
Stamped and enameled ware.....	30		77	23	96	23	77	70
Tobacco products.....	109	3	52	45	89	28	69	74
Chewing and smoking tobacco and snuff.....	26		58	42	90	23	77	72
Cigars and cigarettes.....	83	4	51	46	89	30	66	75
Vehicles for land transportation....	732		75	25	96	49	51	84
Automobiles.....	150		56	44	92	19	81	72
Carriages and wagons.....	27		59	41	89	26	74	65
Car building and repairing, electric-railroad.....	139		90	10	99	75	25	94
Car building and repairing, steam-railroad.....	416		78	22	97	52	47	90
Miscellaneous industries.....	281		70	30	95	30	70	74
Agricultural implements.....	74		77	23	96	28	72	74
Electrical machinery, apparatus, and supplies.....	100		73	27	96	32	68	79
Pianos and organs.....	22		82	18	96	50	50	86
Rubber boots and shoes.....	9		22	78	87	11	89	79
Automobile tires.....	51	2	43	55	89	33	65	86
Shipbuilding, steel.....	25		100		100	8	92	94
Total.....	6,722	1	69	30	93	42	57	81

Wage Changes

WAGE changes reported for the month ending March 15 are again without general significance, being of importance to individual establishments rather than to any industry as a whole.

Wage-rate increases were reported by 41 establishments in 21 industries and wage-rate decreases by 27 establishments in 9 industries.

The increases averaged 7.9 per cent and affected 3,184 employees, or 21 per cent of the employees in the establishments concerned.

The decreases averaged 6.9 per cent and affected 6,913 employees, or 41 per cent of the employees in the establishments concerned.

WAGE ADJUSTMENT OCCURRING BETWEEN FEBRUARY 15 AND MARCH 15, 1925

Industry	Establishments		Per cent of increase or decrease in wage rates		Employees affected		
	Total number reporting	Number reporting increase or decrease in wage rates	Range	Average	Total number	Per cent of employees	
						In establishments reporting increase or decrease in wage rates	In all establishments reporting
			Increases				
Confectionery.....	261	1	7	7.0	21	30	(1)
Ice cream.....	99	1	10	10.0	6	75	(1)
Baking.....	307	2	3-5	4.3	30	17	(1)
Cotton goods.....	341	4	1.8-10	3.7	592	61	(1)
Silk goods.....	200	2	1.5	1.5	150	23	(1)
Woolen and worsted goods.....	190	1	5	5.0	41	5	(1)
Clothing, women's.....	190	1	10	10.0	47	92	(1)
Iron and steel.....	217	1	2.5	2.5	40	7	(1)
Foundry and machine-shop products.....	732	5	3-10	7.6	119	20	(1)
Machine tools.....	183	2	8-10	8.7	14	11	(1)
Stoves.....	85	2	3-16	3.4	60	15	(1)
Furniture.....	390	3	5-10	9.8	482	92	1
Leather.....	122	1	10	10.0	40	10	(1)
Boots and shoes.....	234	1	5.5	5.5	13	16	(1)
Paper and pulp.....	200	1	3	3.0	32	4	(1)
Printing, book and job.....	245	3	16.6-25.8	19.0	191	9	(1)
Printing, newspaper.....	202	1	4	4.0	96	46	(1)
Fertilizers.....	94	5	9-25	12.7	555	77	5
Chewing and smoking tobacco and snuff.....	34	1	10	10.0	23	5	(1)
Automobiles.....	214	2	6-7.5	6.4	613	14	(1)
Electrical machinery, apparatus, and supplies.....	131	1	2	2.0	19	12	(1)
			Decreases				
Cotton goods.....	341	2	7.7-10	9.4	761	100	(1)
Iron and steel.....	217	9	1.5-4.5	2.3	1,761	39	1
Steam fittings and steam and hot-water heating apparatus.....	133	2	7.4-10	9.0	1,950	38	5
Furniture.....	390	2	10	10.0	504	25	1
Boots and shoes.....	234	7	1.5-10	8.8	910	40	1
Fertilizers.....	94	2	9-12.5	9.9	121	98	1
Brick, tile, and terra cotta.....	338	1	10	10.0	81	100	(1)
Automobiles.....	214	1	5	5.0	800	44	(1)
Automobile tires.....	72	1	5	5.0	25	15	(1)

¹ Less than one-half of 1 per cent.

Indexes of Employment and Pay-Roll Totals in Manufacturing Industries

INDEX numbers of employment and of pay-roll totals for March, 1925, for each of the 52 industries surveyed by the Bureau of Labor Statistics, together with general indexes for the combined 12 groups of industries, appear in the following table in comparison with index numbers for February, 1925, and for March, 1924.

The general index of employment for March, 1925, is 92.3 and the general index of pay-roll totals is 96.6.

INDEX OF EMPLOYMENT AND OF PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, MARCH, 1925, AS COMPARED WITH FEBRUARY, 1925, AND MARCH, 1924

[Monthly average, 1923=100]

Industry	1924		1925			
	March		February		March	
	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals
General index	96.4	99.0	91.6	95.1	92.3	96.6
Food and kindred products	96.7	98.6	92.8	94.6	90.1	92.6
Slaughtering and meat packing.....	96.5	95.5	90.2	91.2	85.2	85.1
Confectionery.....	89.2	94.1	85.1	91.5	82.8	91.6
Ice cream.....	89.3	91.0	81.7	83.2	84.5	88.3
Flour.....	95.5	99.4	95.7	98.7	90.6	92.3
Baking.....	102.2	104.0	99.6	99.8	98.3	100.9
Sugar refining, cane.....	103.9	106.0	98.3	99.6	105.4	110.2
Textiles and their products	96.0	96.9	92.2	96.1	92.4	97.0
Cotton goods.....	89.8	89.9	88.2	88.2	87.8	88.8
Hosiery and knit goods.....	100.3	103.6	96.5	104.1	98.4	107.5
Silk goods.....	98.4	99.5	98.6	105.6	100.4	109.5
Woolen and worsted goods.....	95.9	94.5	94.0	97.2	91.9	92.6
Carpets and rugs.....	103.0	107.4	97.7	97.3	98.5	98.7
Dyeing and finishing textiles.....	94.8	94.3	101.8	107.9	102.8	110.1
Clothing, men's.....	98.1	96.2	90.6	91.0	89.0	90.0
Shirts and collars.....	94.8	94.8	85.6	87.4	86.4	90.8
Clothing, women's.....	104.2	106.5	90.9	102.1	93.0	104.8
Millinery and lace goods.....	93.4	97.7	92.8	96.6	94.8	102.4
Iron and steel and their products	94.6	99.5	88.2	93.1	88.8	94.0
Iron and steel.....	106.3	113.3	100.0	105.3	100.6	105.8
Structural ironwork.....	92.2	92.8	87.9	93.0	88.4	93.7
Foundry and machine-shop products.....	87.1	87.2	80.2	82.2	81.0	83.6
Hardware.....	98.4	106.4	92.3	98.7	92.9	98.2
Machine tools.....	94.1	97.4	83.5	88.6	82.9	87.7
Steam fittings and steam and hot-water heating apparatus.....	99.3	107.1	95.4	103.1	95.4	102.7
Stoves.....	92.5	101.1	87.3	90.7	87.5	91.8
Lumber and its products	96.8	100.8	93.3	96.4	92.5	97.9
Lumber and sawmills.....	95.3	98.8	89.7	92.6	88.5	94.6
Lumber, millwork.....	102.6	106.2	99.5	103.8	99.9	103.7
Furniture.....	98.7	100.9	101.7	104.6	101.6	105.7
Leather and its products	97.0	96.1	95.4	95.8	95.4	96.0
Leather.....	94.3	97.5	92.7	96.7	92.6	96.5
Boots and shoes.....	97.9	95.5	96.3	95.4	96.3	95.8
Paper and printing	101.2	104.2	100.8	104.4	101.5	106.0
Paper and pulp.....	96.8	101.2	94.2	100.7	96.6	103.0
Paper boxes.....	100.5	105.1	99.8	102.2	98.4	103.5
Printing, book and job.....	102.8	105.2	103.7	106.1	103.4	107.9
Printing, newspaper.....	103.7	106.9	104.5	107.0	105.6	107.6
Chemicals and allied products	102.5	101.4	92.3	94.0	99.0	106.3
Chemicals.....	98.4	103.5	92.5	98.7	93.5	100.5
Fertilizers.....	137.9	128.1	98.0	92.9	137.4	128.3
Petroleum refining.....	93.1	91.7	89.6	89.2	89.4	92.2
Stone, clay, and glass products	99.1	105.2	91.6	98.0	95.5	101.9
Cement.....	99.0	102.5	87.4	89.8	90.9	94.4
Brick, tile, and terra cotta.....	94.1	98.1	86.7	90.5	94.5	98.2
Pottery.....	111.1	121.6	110.3	113.3	110.0	119.4
Glass.....	99.9	107.0	91.1	100.9	92.7	101.8

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INDEX OF EMPLOYMENT AND OF PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, MARCH, 1925, AS COMPARED WITH FEBRUARY, 1925, AND MARCH, 1924—Con.

[Monthly average, 1923=100]

Industry	1924		1925			
	March		February		March	
	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals
Metal products, other than iron and steel	105.4	106.9	90.9	88.1	95.0	94.5
Stamped and enameled ware	105.4	106.9	90.9	88.1	95.0	94.5
Tobacco products	95.4	98.0	92.8	89.3	93.6	90.4
Chewing and smoking tobacco and snuff	106.1	110.9	99.3	106.3	93.2	98.3
Cigars and cigarettes	94.5	96.5	92.0	87.3	93.6	89.5
Vehicles for land transportation	95.9	96.5	87.3	92.3	89.9	95.6
Automobiles	111.6	113.3	91.1	97.0	97.6	105.0
Carriages and wagons	94.6	101.3	82.6	87.3	88.6	96.3
Car building and repairing, electric-railroad	89.1	90.3	86.9	90.7	89.2	94.0
Car building and repairing, steam-railroad	85.9	86.0	85.1	89.5	85.1	89.7
Miscellaneous industries	95.7	99.2	92.1	96.1	93.2	98.1
Agricultural implements	96.0	102.8	90.4	97.9	93.6	102.6
Electrical machinery, apparatus, and supplies	102.1	108.4	90.0	94.8	89.6	94.4
Pianos and organs	101.5	104.8	97.6	104.2	97.2	106.3
Rubber boots and shoes	79.9	75.6	88.2	96.7	86.4	93.5
Automobile tires	95.5	99.1	106.1	109.8	107.9	112.7
Shipbuilding, steel	93.4	95.7	88.7	92.1	90.5	94.4

The following tables show the general index of employment in manufacturing industries from June, 1914, to March, 1925, and the general index of pay-roll totals from July, 1922, to March, 1925.

GENERAL INDEX OF EMPLOYMENT IN MANUFACTURING INDUSTRIES, JUNE, 1914, TO MARCH, 1925

[Monthly average, 1923=100]

Month	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
January		91.9	104.6	117.0	115.5	110.1	116.1	76.8	87.0	98.0	95.4	90.0
February		92.9	107.4	117.5	114.7	103.2	115.6	82.3	87.7	99.6	96.6	91.6
March		93.9	109.6	117.4	116.5	104.0	116.9	83.9	83.2	101.8	96.4	92.3
April		93.9	109.0	115.0	115.0	103.6	117.1	84.0	82.4	101.8	94.5	
May		94.9	109.5	115.1	114.0	106.3	117.4	84.5	84.3	101.8	90.8	
June	98.9	95.9	110.0	114.8	113.4	108.7	117.9	84.9	87.1	101.9	87.9	
July	95.9	94.9	110.3	114.2	114.6	110.7	110.0	84.5	86.8	100.4	84.8	
August	92.9	95.9	110.0	112.7	114.5	109.9	109.7	85.6	88.0	99.7	85.0	
September	94.9	98.9	111.4	110.7	114.2	112.1	107.0	87.0	90.6	99.8	86.7	
October	94.9	100.8	112.9	113.2	111.5	106.8	102.5	88.4	92.6	99.3	87.9	
November	93.9	103.8	114.5	115.6	113.4	110.0	97.3	89.4	94.5	98.7	87.8	
December	92.9	105.9	115.1	117.2	113.5	113.2	91.1	89.9	96.6	96.9	89.4	

GENERAL INDEX OF PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, NOVEMBER, 1915, TO MARCH, 1925

[Monthly average, 1923=100]

Month	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
January		52.1	69.8	79.6	104.2	126.6	80.6	71.5	91.8	94.5	90.0
February		57.8	70.5	79.8	95.0	124.8	82.4	76.7	95.2	99.4	95.1
March		60.0	73.6	88.2	95.4	133.0	83.3	74.2	100.3	99.0	96.6
April		59.7	69.4	88.8	94.5	130.6	82.8	72.6	101.3	96.9	
May		62.1	73.8	94.5	96.7	135.7	81.8	76.9	104.8	92.4	
June		62.5	76.1	94.3	100.2	138.0	81.0	82.0	104.7	87.0	
July		58.7	73.1	97.5	102.5	124.9	76.0	74.1	99.9	80.8	
August		60.9	75.0	105.3	105.3	132.2	79.0	79.3	99.3	83.5	
September		62.9	74.4	106.6	111.6	128.2	77.8	82.7	100.0	86.0	
October		65.5	82.2	110.3	105.5	123.0	76.8	86.0	102.3	88.5	
November	53.8	69.2	87.4	104.1	111.3	111.3	77.2	89.8	101.0	87.6	
December	56.0	71.0	87.8	111.2	121.5	102.4	81.5	92.9	98.9	91.7	

Recent Employment Statistics

Public Employment Offices

Illinois

THE March, 1925, issue of The Labor Bulletin, issued by the Illinois Department of Labor, states that the ratio of applicants to jobs in February, 1925, showed an improvement over the previous month, there being only 174 persons registered for each 100 positions, as compared with 187.7 in the preceding month. A further improvement was noted in March, according to a statement issued by the chief statistician of the department's general advisory board, the ratio of applicants per 100 jobs having fallen to 161.

Iowa

The work of the Iowa public employment offices for February, 1925, is reported as follows in the Iowa Employment Survey for that month:

PUBLIC EMPLOYMENT SERVICE ACTIVITIES IN IOWA FOR FEBRUARY, 1925

Sex	Registration for jobs	Jobs offered	Number of persons referred to positions	Number of persons placed in employment
Men.....	4,054	873	877	865
Women.....	1,458	848	795	751
Total.....	5,512	1,721	1,672	1,606

Massachusetts

The Department of Labor and Industries of Massachusetts has furnished the following data on operations of the four public employment offices of that State in February, 1924 and 1925.

OPERATIONS OF MASSACHUSETTS PUBLIC EMPLOYMENT OFFICES, FEBRUARY, 1924 AND 1925

Month and year	Number of working days	Applications for positions	Help wanted	Persons referred to positions	Persons reported placed in employment
February, 1924.....	24	29,512	2,538	3,311	2,141
February, 1925.....	23	36,682	2,223	2,934	1,898

Minnesota

During the first three months of 1925, the State employment service of Minnesota placed in employment 13,941 persons, as compared with 13,044 in the same period of 1924. The following table, furnished by the Industrial Commission of Minnesota, reviews the employment activities of the service during the first quarter of 1924 and 1925:

OPERATIONS OF MINNESOTA STATE EMPLOYMENT SERVICE, FIRST QUARTER OF
1924 AND 1925

Month and sex	1924		1925	
	Persons referred to positions	Persons reported placed in employment	Persons referred to positions	Persons reported placed in employment
Men:				
January.....	2, 898	2, 255	4, 283	3, 890
February.....	2, 840	2, 243	2, 801	2, 514
March.....	3, 544	2, 855	2, 786	2, 382
Total.....	9, 282	7, 353	9, 870	8, 786
Women:				
January.....	1, 881	1, 625	2, 261	1, 950
February.....	2, 261	1, 950	1, 725	1, 518
March.....	2, 526	2, 116	1, 918	1, 687
Total.....	6, 668	5, 691	5, 904	5, 155
Farm labor: ¹				
January.....	206	139	235	179
February.....	258	152	187	170
March.....	525	325	380	242
Total.....	989	616	802	591

¹ These figures are included among the placements of "men" and "women" given above.

The commissioner in charge of this branch of works states that notwithstanding a surplus of labor of all other kinds the employment offices are experiencing difficulty in filling requests for farm workers. "Unless this prejudice against farm work is overcome alarming results are liable to follow as the season advances."

North Carolina

The thirty-fourth report of the Department of Labor and Printing of North Carolina contains the following data as to the activities of the public employment bureau of that department from October 1, 1923, to October 31, 1924:

ACTIVITIES OF NORTH CAROLINA PUBLIC EMPLOYMENT BUREAU, OCTOBER 1,
1923, TO OCTOBER 31, 1924

Sex, and kind of worker	Number of registrations	Help wanted	Number referred to positions	Number reported placed in employment
Males:				
Unskilled.....	19, 056	20, 889	18, 330	17, 134
Skilled.....	7, 471	5, 932	6, 310	5, 305
Clerical and professional.....	3, 176	1, 366	1, 708	1, 140
Total.....	29, 703	28, 187	26, 348	23, 579
Females:				
Domestic.....	5, 984	5, 859	6, 462	5, 164
Industrial.....	520	259	328	255
Clerical and professional.....	2, 506	1, 336	1, 428	1, 221
Total.....	9, 010	7, 454	8, 218	6, 640
Grand total.....	38, 713	35, 641	34, 566	30, 219

Ohio

The Department of Industrial Relations of Ohio furnished the following report on the operations of the State-city employment service of that State in March, 1925:

OPERATIONS OF STATE-CITY EMPLOYMENT SERVICE OF OHIO, MARCH, 1925

Group	Number of applicants	Number of persons applied for	Persons referred to positions	Persons reported placed in employment
Males:				
Nonagricultural.....	37,910	11,390	11,569	10,291
Farm and dairy.....	546	307	337	216
Total, males.....	38,456	11,697	11,906	10,507
Females.....	17,017	8,802	8,419	7,343
Grand total.....	55,473	20,499	20,325	17,850

Oklahoma

The number of placements made by the Oklahoma public employment offices in February, 1925, compared with the preceding month and February, 1924, are reported as follows in the Oklahoma Labor Market for March 15, 1925:

ACTIVITIES OF OKLAHOMA PUBLIC EMPLOYMENT OFFICES IN JANUARY AND FEBRUARY, 1925, AND FEBRUARY, 1924

Industry	February, 1924	January, 1925	February, 1925
Agriculture.....	202	134	264
Building and construction.....	105	54	110
Clerical (office).....	8	1	4
Manufacturing.....	25	55	45
Personal service.....	1,261	991	1,146
Miscellaneous.....	1,387	1,051	1,474
Total.....	2,988	2,286	3,043

Wisconsin¹

The operations of the Federal-State-municipal employment service of Wisconsin in March, 1925, as compared with March, 1924, are shown briefly in the table given below:

ACTIVITIES OF FEDERAL-STATE-MUNICIPAL EMPLOYMENT SERVICE OF WISCONSIN, MARCH, 1924, AND MARCH, 1925

Item	March, 1924			March, 1925		
	Males	Females	Total	Males	Females	Total
Registrations.....	8,346	3,962	12,308	8,438	4,258	12,696
Help wanted.....	7,411	3,335	10,746	6,784	3,632	10,416
Persons referred to positions.....	7,226	3,345	10,571	6,678	3,702	10,380
Persons placed in employment.....	5,932	2,473	8,405	5,191	2,661	7,852

¹ Wisconsin. Industrial Commission. Mimeographed report.

State Departments of Labor

California

THE following figures from the California Labor Market Bulletin for March, 1925, show changes in the number of employees and in weekly pay rolls in 697 California establishments in February, 1925, compared with the preceding month:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 697 CALIFORNIA ESTABLISHMENTS BETWEEN JANUARY AND FEBRUARY, 1925

Industry	Number of firms reporting	Employees		Weekly pay roll	
		Number in February, 1925	Per cent of increase (+) or decrease (-), as compared with January, 1925	Amount in February, 1925	Per cent of increase (+) or decrease (-), as compared with January, 1925
Stone, clay, and glass products:					
Miscellaneous stone and mineral products.....	12	1,682	-2.3	\$48,670	+6.9
Lime, cement, plaster.....	7	1,784	-5.7	61,217	+1.5
Brick, tile, pottery.....	19	2,965	+5	79,268	+1.8
Glass.....	4	885	-10.9	25,633	-13.2
Total.....	42	7,316	-3.2	214,788	+7
Metals, machinery, and conveyances:					
Agricultural implements.....	5	314	+9.8	9,851	+15.2
Automobiles, including bodies and parts.....	14	3,283	+3.0	104,505	+10.2
Brass, bronze, and copper products.....	10	879	+6.8	28,099	+8.4
Engines, pumps, boilers, and tanks.....	13	1,886	+8.1	60,873	+11.1
Iron and steel forgings, bolts, nuts, etc.....	7	2,110	-7	69,478	+6.3
Structural and ornamental steel.....	14	3,578	-1.0	114,980	+9.1
Ship and boat building and naval repairs.....	6	4,420	-5.6	153,850	-7.9
Tin cans.....	3	1,916	+6.3	48,406	+4.9
Other iron foundry and machine-shop products.....	64	7,028	-1.4	210,572	+5.8
Other sheet-metal products.....	22	1,604	+2.6	48,616	+3.8
Cars, locomotives, and railway repair shops.....	16	8,927	+1	262,618	+5.3
Total.....	174	35,945	+2	1,111,848	+4.6
Wood manufactures:					
Sawmills and logging camps.....	22	10,001	-3.6	261,709	-7.9
Planing mills, sash and door factories, etc.....	44	11,058	-4.1	303,699	-1.8
Other wood manufactures.....	44	4,056	+3.6	113,725	+5.7
Total.....	110	25,115	-2.7	679,133	-3.1
Leather and rubber goods:					
Tanning.....	10	1,066	(1)	29,239	+1.4
Finished leather products.....	7	585	+1.0	11,832	+4.2
Rubber products.....	6	2,427	+2.0	69,664	+3.1
Total.....	23	4,078	+1.3	110,735	+2.7
Chemicals, oils, paints, etc.:					
Explosives.....	4	496	(1)	15,251	+5.2
Mineral oil refining.....	9	11,105	+1.9	428,754	+5.5
Paints, dyes, and colors.....	6	414	+5.9	10,818	+6.6
Miscellaneous chemical products.....	12	2,312	-3	66,404	+3.7
Total.....	31	14,327	+1.6	521,227	+5.3
Printing:					
Paper boxes, bags, cartons, etc.....	9	2,050	-8	51,033	+1
Printing.....	35	1,908	-1.1	71,075	-1.0
Publishing.....	13	3,309	+2.6	119,273	-2.5
Other paper products.....	10	948	-6	23,508	+6.4
Total.....	67	8,215	+5	264,890	-9

¹ Less than one-tenth of 1 per cent.

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 697 CALIFORNIA ESTABLISHMENTS BETWEEN JANUARY AND FEBRUARY, 1925—Continued

Industry	Number of firms reporting	Employees		Weekly pay roll	
		Number in February, 1925	Per cent of increase (+) or decrease (-), as compared with January, 1925	Amount in February, 1925	Per cent of increase (+) or decrease (-), as compared with January, 1925
Textiles:					
Knit goods.....	7	789	-4.7	\$18,946	-0.9
Other textile products.....	7	1,208	-5.2	24,672	+2.4
Total.....	14	1,997	-5.0	43,618	+1.0
Clothing, millinery, and laundrying:					
Men's clothing.....	23	2,601	+6.6	56,994	+7.9
Women's clothing.....	13	1,019	+1.2	20,467	+3.0
Millinery.....	6	527	+26.1	9,927	+23.1
Laundries, cleaning, and dyeing.....	23	3,477	+2	82,141	-9
Total.....	65	7,624	+4.0	169,529	+3.6
Food, beverages, and tobacco:					
Canning and preserving of fruits and vegetables.....	18	2,511	-11.2	53,614	-6.1
Canning and packing of fish.....	9	951	-27.3	11,361	-32.1
Confectionery and ice cream.....	31	1,780	+3	47,045	+7.5
Groceries, not elsewhere specified.....	6	580	+5	13,382	+1.9
Bread and bakery products.....	22	3,606	+3.4	107,443	+4
Sugar.....	6	3,137	+15.1	97,262	+22.9
Slaughtering and meat products.....	14	3,001	-2.4	87,298	-1.9
Cigars and other tobacco products.....	4	983	-7.6	17,208	-15.0
Beverages.....	4	457	+10.7	9,681	-1
Dairy products.....	8	1,766	+1.0	63,510	+4.1
Flour and grist mills.....	10	1,208	-9.5	31,739	-8.5
Ice manufacture.....	8	1,078	+3.2	34,325	+5.9
Other food products.....	13	927	+1.6	20,174	-1.1
Total.....	153	21,985	-1.4	594,042	+1.7
Water, light, and power.....	4	8,656	-6.3	259,900	-3.7
Miscellaneous.....	14	1,878	+3.1	43,580	+7.1
Total, all industries.....	697	137,136	-9	4,013,289	+1.6

Illinois

The following table, taken from the March, 1925, issue of The Labor Bulletin, published by the Illinois Department of Labor, shows the change in the number of employees in February, 1925, as compared with January, 1925, and February, 1924:

CHANGES IN VOLUME OF EMPLOYMENT IN ILLINOIS IN FEBRUARY, 1925, AS COMPARED WITH JANUARY, 1925, AND FEBRUARY, 1924, BY INDUSTRY

Industry	February, 1925		Per cent of change	
	Number of firms reporting	Number of employees	January, 1925, to February, 1925	February, 1924, to February, 1925
Stone, clay, and glass products:				
Miscellaneous stone and mineral products.....	24	1,490	+1.6	-19.5
Lime, cement, and plaster.....	7	424	-2.1	-6.7
Brick, tile, and pottery.....	31	4,829	+4.2	-6.4
Glass.....	17	4,377	+3.6	-.6
Total.....	79	11,120	+3.4	-6.1
Metals, machinery, and conveyances:				
Iron and steel.....	114	38,141	+2.9	+.8
Sheet metal work and hardware.....	34	9,024	+8.6	+1.7
Tools and cutlery.....	16	1,757	-3.2	-10.7
Cooking, heating, and ventilating apparatus.....	24	4,772	+6.7	-10.2
Brass, copper, zinc, Babbitt metal.....	20	2,790	+1.5	+11.0
Cars and locomotives.....	15	13,051	+1.4	+1.0
Automobiles and accessories.....	30	8,786	+11.6	-18.4
Machinery.....	50	16,067	+2.4	-10.0
Electrical apparatus.....	30	35,347	-2.6	-27.7
Agricultural implements.....	28	7,754	+2.9	-7.0
Instruments and appliances.....	8	1,925	+2.4	-21.8
Watches, watch cases, clocks, jewelry.....	14	7,579	+.4	+7.3
Total.....	383	146,993	+2.0	-10.6
Wood products:				
Sawmill and planing mill products.....	34	2,604	-.4	-.1
Furniture and cabinet work.....	48	7,060	+6.1	-2.7
Pianos, organs, and other musical instruments.....	17	3,130	-1.8	-15.2
Miscellaneous wood products.....	23	2,719	+.4	-8.9
Household furnishings.....	7	631	+.6	+5.6
Total.....	129	16,144	+2.3	-5.9
Furs and leather goods:				
Leather.....	9	2,019	+3.8	-.2
Furs and fur goods.....	8	47	-14.5	-13.4
Boots and shoes.....	29	11,549	+1.1	+14.0
Miscellaneous leather goods.....	7	1,581	+.6	-16.8
Total.....	53	15,196	+1.3	+8.1
Chemicals, oils, paints, etc.:				
Drugs and chemicals.....	21	2,231	+1.6	-5.9
Paints, dyes, and colors.....	25	2,762	+4.1	+8.7
Mineral and vegetable oil.....	8	3,608	+3.1	-4.0
Miscellaneous chemical products.....	8	3,849	+3.8	-6.5
Total.....	62	12,450	+3.3	-2.7
Printing and paper goods:				
Paper boxes, bags, and tubes.....	39	3,935	-.9	+2.1
Miscellaneous paper goods.....	16	1,102	+1.0	+2.2
Job printing.....	79	8,844	+.1	+4.6
Newspapers and periodicals.....	12	3,675	+1.2	+4.6
Edition bookbinding.....	7	1,336	-4.8
Total.....	153	18,892	-.2	+2.0
Textiles:				
Cotton goods.....	7	565	+7.6	+.7
Knit goods, cotton and woolen hosiery.....	9	2,789	+.4	-21.5
Thread and twine.....	7	702	+6.4	-.3
Total.....	23	4,056	+2.3	-8.2

CHANGES IN VOLUME OF EMPLOYMENT IN ILLINOIS IN FEBRUARY, 1925, AS COMPARED WITH JANUARY, 1925, AND FEBRUARY, 1924, BY INDUSTRY—Continued

Industry	February, 1925		Per cent of change	
	Number of firms reporting	Number of employees	January, 1925, to February, 1925	February, 1924, to February, 1925
Clothing, millinery, and laundering:				
Men's clothing.....	9	11,985	+2.8	-8.8
Men's shirts and furnishings.....	4	974	+22.1	-6.4
Overalls and work clothing.....	12	832	+1.2	-9.3
Men's hats and caps.....	2	71	+129.0	-1.0
Women's clothing.....	21	1,310	+5.6	-9.8
Women's underwear and furnishings.....	9	544	+16.7	-2.6
Women's hats.....	7	1,095	+3.1	-1.6
Laundering, cleaning, and dyeing.....	38	2,863	+1.0	+8.5
Total.....	102	19,674	+4.1	-6.1
Food, beverages, and tobacco:				
Flour, feed, and other cereal products.....	22	969	+4.5	-12.7
Fruit and vegetable canning and preserving.....	15	436	+23.5	-7.4
Groceries not elsewhere classified.....	28	4,866	+3.8	+1.2
Slaughtering and meat packing.....	19	22,722	-5.4	-13.2
Dairy products.....	11	3,499	+1	+2.5
Bread and other bakery products.....	18	2,711	+2.7	-7.1
Confectionery.....	21	2,428	+6.8	-3.5
Beverages.....	19	1,159	+1.7	-12.4
Cigars and other tobacco products.....	14	1,249	-2.9	-14.1
Manufactured ice.....	22	186	-6.1	-15.0
Ice cream.....	15	648	+12.5
Total.....	204	40,873	-1.8	-9.0
Total, all manufacturing industries.....	1,188	285,398	+1.5	-7.6
Trade—wholesale and retail:				
Department stores.....	27	2,981	-5.6	-3.9
Wholesale dry goods.....	6	571	-1.2	-35.6
Wholesale groceries.....	6	768	+1.7	.0
Mail-order houses.....	5	17,244	+5.2	-3.8
Total.....	44	21,564	+3.3	-3.8
Public utilities:				
Water, light, and power.....	6	13,632	-4.5	-3.8
Telephone.....	9	26,581	-.3	+3.1
Street railways.....	24	26,064	-1.0	-2.4
Railway car repair shops.....	26	12,642	-2.9	-2.9
Total.....	65	78,919	-1.7	+1.8
Coal mining.....	51	14,612	-4.9	-4.7
Building and contracting:				
Building construction.....	118	5,005	+3.9	-21.1
Road construction.....	13	89	-23.9	+35.7
Miscellaneous contracting.....	26	901	+16.2	+25.1
Total.....	157	6,085	+5.2	-9.5
Grand total, all industries.....	1,505	406,578	+1.8	-6.4

In a review of the industrial situation in March, 1925, released on April 10, 1925, the chief statistician of the general advisory board to the Illinois Department of Labor makes the following statement:

A mixed trend and a "spotty" condition are revealed as the outstanding characteristics of present industrial operations in Illinois from the labor market survey in March by the Illinois State Department of Labor. Although the majority of plants and industries continued the upward trend, which was begun near the close of last year, the minority of industries, in which are represented some of the most important employers, have been laying off help rather freely. As a result, the aggregate of factory employment fell 1.1 per cent during the month of March, throwing about 8,000 workers out of their jobs. It appears that of the 31,000 workers put back to work in the preceding 3 months, 23,000 are still on the pay rolls of employers.

Iowa

The Bureau of Labor of Iowa furnishes the report given below showing percentage changes in the number of employees in specified industries in Iowa in February, 1925, as compared with the previous month.

CHANGES IN VOLUME OF EMPLOYMENT IN IOWA, JANUARY TO FEBRUARY, 1925

Industry	Number of firms reporting	Employees on pay roll February, 1925		Industry	Number of firms reporting	Employees on payroll February, 1925	
		Number	Per cent of increase (+) or decrease (-) as compared with January, 1925			Number	Per cent of increase (+) or decrease (-) as compared with January, 1925
Food and kindred products:				Leather products:			
Meat packing.....	8	6,729	-6.8	Shoes.....	3	338	-4.0
Cereals.....	2	1,216	+3.8	Saddlery and harness.....	8	350	+8.7
Flour and mill products.....	4	127	-4.5	Fur goods and tanning, also leather gloves.....	2	109	-6.8
Bakery products.....	7	776	+4	Total.....	13	797	+1.1
Confectionery.....	9	442	-2.2				
Poultry, produce, butter, etc.....	8	754	-10.1	Paper products, printing and publishing:			
Sugar, sirup, starch, glucose.....	3	823	-2.4	Paper and paper products.....	5	338	+3.4
Other food products, coffee, etc.....	6	472	-2	Printing and publishing.....	13	2,440	+1.7
Total.....	47	11,339	-4.5	Total.....	18	2,778	+1.9
Textiles:				Patent medicines.....	8	425	-3.5
Clothing, men's.....	11	1,008	+2.9	Stone and clay products:			
Millinery.....	2	176	-7.4	Cement, plaster, gypsum.....	6	944	-8.3
Clothing, women's, and woolen goods.....	3	477	+6.2	Brick and tile (clay).....	12	529	+37.0
Gloves, hosiery, awnings, etc.....	7	727	+7.4	Marble and granite, crushed rock and stone.....	3	63	+1.6
Buttons, pearl.....	8	912	+7.9	Total.....	21	1,536	+4.0
Total.....	31	3,300	+5.1	Tobacco, cigars.....	4	348	+1.8
Iron and steel work:				Railway car shops.....	5	3,050	-2.0
Foundry and machine shops.....	30	2,967	+5.1	Various industries:			
Brass and bronze products, plumbers' supplies.....	5	533	+4.3	Auto tires.....	3	158	-15.1
Automobiles, tractors, engines, etc.....	5	1,719	+8.2	Brooms and brushes.....	4	180	-2.7
Furnaces.....	5	367	+6.7	Laundries.....	5	228	+1.3
Pumps.....	4	372	+5.1	Mercantile.....	9	3,447	+3
Agricultural implements.....	8	924	+13.0	Public service.....	2	237	-2.1
Washing machines.....	7	1,273	+5.8	Seeds.....	1		
Total.....	64	8,155	+6.1	Wholesale houses.....	25	1,283	+7
Lumber products:				Other industries.....	7	1,318	+9.2
Millwork, interiors, etc.....	15	2,260	+2.9	Total.....	56	6,851	+1.2
Furniture, desks, etc.....	8	851	+13.3	Grand total.....	303	42,244	+1.0
Refrigerators.....	3	213	+18.3				
Coffins, undertakers' goods.....	5	175	-3.9				
Carriages, wagons, truck bodies.....	5	166	+6				
Total.....	36	3,665	+5.7				

Maryland

The Commissioner of Labor and Statistics of Maryland presents the following report on volume of employment in Maryland in March, 1925, covering 52,071 employees with a total pay roll of \$1,216,841.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN MARYLAND IN FEBRUARY AND MARCH, 1925

Industry	Number of establishments reporting for both months	March, 1925			
		Employment		Pay roll	
		Number of employees	Per cent of increase (+) or decrease (-) as compared with February, 1925	Amount	Per cent of increase (+) or decrease (-) as compared with February, 1925
Bakery.....	5	518	+0.3	\$14,987	+1.6
Beverages and soft drinks.....	4	185	+8.8	5,074	+7.8
Boots and shoes.....	9	1,264	-3.4	22,625	-3.5
Boxes, paper and fancy.....	9	537	+4.8	8,141	+6.6
Boxes, wooden.....	6	384	-1.8	7,357	+4.4
Brass and bronze.....	4	2,599	+6.8	61,320	+2.8
Brick, tile, etc.....	7	899	+6.7	21,724	+9.2
Brushes.....	6	1,012	+6	19,091	+5.2
Canning and preserving.....	3	498	-5.9	6,663	-10.7
Car building and repairing.....	5	4,447	+4	150,607	+2.7
Chemicals.....	6	1,206	-----	35,136	+5.1
Clothing, men's outer garments.....	6	2,304	-3	56,730	-4.0
Clothing, women's outer garments.....	7	1,083	+1.6	13,846	+1.7
Confectionery.....	6	1,073	-1.1	14,551	+4.3
Cotton goods.....	8	2,533	-1.5	41,317	-2.5
Fertilizer.....	4	835	+52.6	17,663	+64.9
Food preparations.....	3	105	+2.9	2,832	+76.4
Foundry.....	15	2,357	-5	63,363	-1.9
Furnishing goods, men's.....	7	2,977	+4.5	38,913	+6.9
Furniture.....	12	1,107	-2.4	22,821	-1.7
Glass.....	4	1,162	-4.6	28,059	-7
Ice cream.....	5	337	+2.4	10,382	+2.4
Leather goods.....	6	654	+4.4	13,023	+4.2
Lithographing.....	4	451	+2.9	13,234	+3.4
Lumber and planing.....	9	662	+3.5	17,652	+9.4
Mattresses and spring beds.....	4	1,210	-----	2,779	+6
Pianos.....	3	909	+1.2	25,684	-1.4
Plumbers' supplies.....	4	1,230	+5.9	33,717	+11.0
Printing.....	11	1,444	+1.5	49,106	+1.0
Rubber tire manufacturing ¹	1	2,292	+1.6	132,206	-9.3
Shipbuilding.....	3	534	+19.7	15,163	+24.2
Shirts.....	5	822	-7.6	11,153	-7.4
Silk goods.....	4	760	+4.5	11,924	+6.8
Slaughtering and meat packing.....	3	973	-7	26,137	-2
Stamping and enameled ware.....	5	1,261	+4	22,923	-7
Tinware.....	4	2,750	+9.4	56,268	+3.6
Tobacco.....	8	1,081	-1.8	15,380	+1.4
Umbrellas.....	3	364	+5	5,580	+2.8
Miscellaneous.....	18	4,011	+2.5	76,553	+4.0

¹ Pay-roll period one-half month.

Massachusetts

A recent press release from the Department of Labor and Industries of Massachusetts shows the following changes in volume of employment in 944 establishments in that State from January to February, 1925:

NUMBER OF EMPLOYEES IN 944 MANUFACTURING ESTABLISHMENTS IN MASSACHUSETTS, WEEK INCLUDING OR ENDING NEAREST TO JANUARY 15 AND FEBRUARY 15, 1925

Industry	Number of establishments reporting	Number of employees on pay roll			
		January, 1925	February, 1925		
			On full time	On part time	Total
Automobiles, including bodies and parts.....	23	2,936	2,553	421	2,974
Bookbinding.....	15	950	786	213	999
Boot and shoe cut stock and findings.....	52	2,143	1,306	899	2,205
Boots and shoes.....	74	22,795	12,990	10,493	23,483
Boxes, paper.....	25	2,103	1,292	874	2,166
Boxes, wooden packing.....	13	1,215	1,104	133	1,237
Bread and other bakery products.....	37	3,317	3,228	74	3,302
Carpets and rugs.....	5	3,666	3,748	-----	3,748
Cars and general construction and repairs, steam railroad shops.....	4	3,046	3,054	-----	3,054
Clothing, men's.....	33	3,434	2,842	832	3,674
Clothing, women's.....	29	1,488	1,348	253	1,601
Confectionery.....	13	3,343	2,627	619	3,246
Copper, tin, sheet iron, etc.....	17	921	928	-----	928
Cotton goods.....	54	43,543	33,170	10,512	43,682
Cutlery and tools.....	23	4,491	4,119	403	4,522
Dyeing and finishing, textiles.....	6	6,455	3,147	3,377	6,524
Electrical machinery, apparatus, and supplies.....	12	9,642	2,605	7,084	9,689
Foundry products.....	27	2,734	1,718	1,066	2,784
Furniture.....	29	3,276	2,699	568	3,267
Hosiery and knit goods.....	11	5,345	2,762	2,764	5,526
Jewelry.....	37	2,689	1,696	986	2,682
Leather, tanned, curried, and finished.....	26	4,894	3,788	1,219	5,007
Machine-shop products.....	35	5,416	3,863	1,672	5,535
Machine tools.....	23	1,504	929	611	1,540
Musical instruments.....	12	1,383	950	412	1,362
Paper and wood pulp.....	21	6,100	5,142	1,030	6,172
Printing and publishing, book and job.....	42	3,346	2,370	1,003	3,373
Printing and publishing, newspaper.....	22	2,173	2,171	-----	2,171
Rubber footwear.....	3	8,136	7,150	1,366	8,516
Rubber goods.....	9	2,954	2,884	50	2,934
Rubber tires and tubes.....	3	1,298	1,280	84	1,364
Silk goods.....	12	4,097	1,658	2,523	4,181
Slaughtering and meat packing.....	5	1,936	317	1,524	1,841
Stationery goods.....	8	1,469	1,348	50	1,398
Steam fittings and steam and hot-water heating apparatus.....	8	1,389	1,348	59	1,407
Stoves and stove linings.....	5	1,306	74	1,689	1,763
Textile machinery and parts.....	16	5,370	944	4,435	5,379
Tobacco.....	7	809	520	263	783
Woolen and worsted goods.....	57	21,325	10,776	10,792	21,568
All other industries.....	91	24,409	11,826	12,700	24,526
Total.....	944	228,846	149,060	83,053	232,113

New York

The Department of Labor of New York has furnished the following report showing changes in the number of employees and amount of pay roll in certain manufacturing industries in that State in February, 1925, compared with February, 1924, and January, 1925:

CHANGES IN VOLUME OF EMPLOYMENT AND PAY ROLL IN SPECIFIED MANUFACTURING INDUSTRIES IN NEW YORK STATE FROM FEBRUARY, 1924, AND JANUARY, 1925, TO FEBRUARY, 1925

Industry	Per cent of increase (+) or decrease (-)			
	January, 1925, to February, 1925		February, 1924, to February, 1925	
	Employment	Pay roll	Employment	Pay roll
Cement.....	-16.3	-17.3	-19.2	-17.4
Brick.....	-17.6	-4.7	-40.3	-44.9
Pottery.....	+3.4	+3.9	-6.0	-13.2
Glass.....	+1.1	-2.7	-8.6	-8.7
Pig iron and rolling mill products.....	+1.1	-9.9	-5.3	-6.3
Structural and architectural iron work.....	+3.3	-3.6	-8.9	-12.9
Hardware.....	+3.9	+3.0	-11.6	-8.0
Stamped ware.....	+10.7	+0.4	-22.3	-20.8
Cutlery and tools.....	+5.4	+7.6	-15.6	-14.9
Steam and hot-water heating apparatus.....	+4.3	+3.7	+8.4	+10.1
Stoves.....	+12.3	+14.3	-29.1	-36.7
Agricultural implements.....	+4.6	+3.4	-8.2	-5.3
Electrical machinery, apparatus, etc.....	-7	-6	-7.5	-8.8
Foundry and machine shops.....	+1.1	-3.9	-7	+2.1
Automobiles and parts.....	+4.4	+6.9	-18.9	-19.3
Car, locomotive, and equipment factories.....	-3.6	-4.2	-6.9	-9.0
Railway repair shops.....	+1.1	+5.0	+4	+6
Lumber, millwork.....	+3	-1	-9.5	-5.8
Lumber, sawmills.....	-1.3	-1.7	+7.0	+1.8
Furniture and cabinetwork.....	-3	-2.5	+3	+1.7
Furniture.....	-1	-1.8	+2.8	+4.6
Pianos, organs, and other musical instruments.....	-6	-5.0	-3.6	-4.8
Leather.....	-2.6	-2.1	-1.6	-2.6
Boots and shoes.....	+3.0	+2.7	-1.2	+3.9
Drugs and chemicals.....	+1.1	+7	-8.4	-4.4
Petroleum refining.....	-2.9	-7.7	-10.9	-11.2
Paper boxes and tubes.....	-6	-2.6	-6.7	-5.3
Printing, newspapers.....	-1.3	-8	-16.8	-15.3
Printing, book and job.....	-3	-4.3	-5	(1)
Silk and silk goods.....	+4.7	+4.0	-13.7	-6.6
Carpets and rugs.....	+1.5	+4	+1.1	-8
Woolens and worsteds.....	+11.0	+11.5	+5.8	+6.3
Cotton goods.....	-31.0	-37.1	-25.4	-18.0
Cotton and woolen hosiery and knit goods.....	+8.2	+8.4	-9.9	-13.3
Dyeing and finishing textiles.....	-1.3	-8.0	-3	+5.4
Men's clothing.....	+6.7	+7.8	-5.2	-3.3
Shirts and collars.....	+2.4	+6.9	-5.9	+8
Women's clothing.....	+9.6	+13.1	-8.0	-3.9
Women's headwear.....	+5	+1.1	-1.1	+3.0
Flour.....	-1.0	-3.9	+2.0	+5.4
Sugar refining.....	+40.4	+25.4	-10.9	-16.2
Slaughtering and meat products.....	-3.0	-5.6	-7.7	-8.5
Bread and other bakery products.....	-1.7	-5.6	-11.6	-12.6
Confectionery and ice cream.....	+3.0	-1.0	+9.1	+5.0
Cigars and other tobacco products.....	-3.0	-16.4	-8.7	-16.0
Total.....	+1.8	+6	-6.5	-5.6

¹ Less than one-tenth of 1 per cent.

Oklahoma

According to the March 15, 1925, issue of the Oklahoma Labor Market, employment increased in 13 industries and decreased in 13, and the total pay rolls increased in 16 industries and decreased in 10 in February, 1925, as compared with the previous month, as shown by the following statistics:

CHANGES IN EMPLOYMENT AND PAY ROLLS IN 710 INDUSTRIAL ESTABLISHMENTS
IN OKLAHOMA FROM JANUARY TO FEBRUARY, 1925

Industry	Number of plants	February, 1925			
		Employment		Pay roll	
		Number of employees	Per cent of change as compared with January, 1925	Amount	Per cent of change as compared with January, 1925
Cottonseed-oil mills.....	13	414	+5.6	\$7,745	+4.8
Food production:					
Bakeries.....	35	448	-.4	11,602	+.3
Confections.....	7	70	-23.9	1,319	-19.2
Creameries and dairies.....	11	90	+2.3	2,195	+3.0
Flour mills.....	44	389	-10.0	9,100	-12.4
Ice and ice cream.....	33	239	+1.3	6,822	+1.2
Meat and poultry.....	14	1,465	-3.5	33,358	+7.0
Lead and zinc:					
Mines and mills.....	46	3,370	+1.2	95,583	+.2
Smelters.....	17	2,175	-1.2	57,730	+.5
Metals and machinery:					
Auto repairs, etc.....	29	1,114	-5.4	39,347	-11.9
Foundry and machine shops.....	38	840	+3.1	23,739	+2.3
Tank construction and erecting.....	16	380	-13.0	8,623	-18.2
Oil industry:					
Production and gasoline extraction.....	123	3,528	+4.8	109,205	+4.3
Refineries.....	66	4,865	+4.9	148,316	+4.3
Printing, job work.....	24	268	-7.6	7,753	-4.0
Public utilities:					
Railroad shops.....	11	1,907	+1.8	51,139	-2.2
Street railways.....	6	582	+1.2	14,775	-.9
Water, light, and power.....	50	1,043	+.6	26,543	-.1
Stone, clay, and glass:					
Brick and tile.....	11	479	+190.3	6,592	+117.2
Cement and plaster.....	6	946	-2.8	22,563	+3.4
Stone.....	6	211	-.9	3,571	+9.5
Glass manufacturing.....	9	1,012	+11.7	24,803	+9.9
Textiles and cleaning:					
Textile manufacturing.....	9	248	-9.5	3,764	-18.3
Laundry and cleaning.....	52	1,309	-1.0	22,724	-1.0
Woodworking:					
Sawmills.....	14	369	+12.5	4,671	+18.9
Millwork, etc.....	20	306	-5.0	8,314	+.5
Total, all industries.....	710	28,067	+2.2	751,897	+1.4

Wisconsin

The report given below, taken from the Wisconsin Labor Market for February, 1925, shows variations in employment and in pay rolls in various industries in Wisconsin from January 15 to February 15, 1925:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF PAY ROLL IN VARIOUS INDUSTRIES IN WISCONSIN FROM FEBRUARY, 1924, AND JANUARY, 1925, TO FEBRUARY, 1925

Kind of employment	Per cent of increase (+) or decrease (-)			
	January to February, 1925		February, 1924 to February, 1925 ¹	
	Employment	Pay roll	Employment	Pay roll
<i>Manual</i>				
Agriculture.....			-19.6	
Logging.....	+6.3		-26.4	
Mining.....	+12.1	+14.5	+38.1	+30.8
Lead and zinc.....	+16.2	+18.4	+121.9	+114.3
Iron.....	+3.5	+7.2	-26.3	-27.3
Stone crushing and quarrying.....	-11.9	-1.2	-16.4	-17.5
Manufacturing.....	+1.8	+6.4	-2.7	-1.1
Stone and allied industries.....	+1.4	+2.2	+5.3	+17.0
Brick, tile, and cement blocks.....	-2.2	+8.0	+8.5	+8.6
Stone finishing.....	+2.2	+1.2	+4.6	+18.7
Metal.....	+3.0	+9.0	-1.9	-3.3
Pig iron and rolling-mill products.....	+1.2	-1.1	+2.2	.0
Structural-iron work.....	-.3	+3.2	-17.5	-25.9
Foundries and machine shops.....	+3.4	+6.1	-5.5	-14.4
Railroad repair shops.....	-.3	+1.1	+4.1	+2.1
Stoves.....	+6.1	+39.6	-3.3	.0
Aluminum and enamel ware.....	+4.0	+14.3	-1.7	+4.1
Machinery.....	+4.9	+5.3	-10.2	-14.8
Automobiles.....	+2.2	+20.2	+8.1	+17.3
Other metal products.....	+3.3	+8.6	+1.2	+3.3
Wood.....	+2.7	+10.6	-4.0	-2.1
Sawmills and planing mills.....	+5.0	+15.8	-10.7	-7.0
Box factories.....	+.8	+15.9	-20.4	-20.4
Panel and veneer mills.....	+1.1	+7.5	-2.5	+5
Sash, door, and interior finish.....	+1.1	+4.8	+3.9	+6.0
Furniture.....	+1.1	+9.4	+3.8	+1.8
Other wood products.....	+4.2	+11.9	-3.0	-3.6
Rubber.....	+4.5	+4.5	+18.8	+31.6
Leather.....	+1.6	+4.8	-4.4	+5.0
Tanning.....	+6	+2.1	-5.1	+9.1
Boots and shoes.....	+6	+6.1	-1.0	+6.4
Other leather products.....	+5.9	+8.9	-9.5	-7.5
Paper.....	+4	+2.4	-5.0	-4.5
Paper and pulp mills.....	+8	+2.0	-5.3	-5.3
Paper boxes.....	-.5	-.6	-6.6	-.4
Other paper products.....	-.3	+7.3	-2.4	-3.5
Textiles.....	+5	+5.1	-14.1	-9.5
Hosiery and other knit goods.....	-.7	+3.5	-17.6	-20.2
Clothing.....	+2.4	+3.4	-6.4	+3.1
Other textile products.....	+1.1	+14.7	-15.7	-.6
Foods.....	+1.2	-1.1	+2.2	-2.0
Meat packing.....	-12.9	-14.4	-5.0	-11.0
Baking and confectionery.....	+2.3	+.2	-4.9	-.2
Milk products.....	+4.8	+5.6	-8.4	-5.9
Canning and preserving.....	-1.1	-.5	+17.0	+41.1
Flour mills.....	-12.0	-6.4	-23.5	-52.7
Tobacco manufacturing.....	+32.0	+10.3	+157.4	+93.2
Other food products.....	+7.1	+6.7	+11.1	+5.3
Light and power.....	-4	-2.3	+8.2	+15.7
Printing and publishing.....	+1.2	+1.4	+2.4	+1.9
Laundering, cleaning, and dyeing.....	+4	-2.3	-.4	+1.0
Chemical (including soap, glue, and explosives).....	-3.4	+.6	-22.8	-15.4
Construction:				
Building.....	-10.7	-10.3	+3.2	-6.6
Highway.....	-37.3		-69.0	-28.7
Railroad.....	-1.8	+3.0	-.9	-11.8
Marine, dredging, sewer digging.....	+52.3	+58.1	-2.0	-28.7
Communication:				
Steam railways.....	+3.0	+1.2	+2.9	-5.0
Electric railways.....	-1.2	-2.0	-27.6	-27.2
Express, telephone, and telegraph.....	-6.1	-7.9	-1.5	+3.9
Wholesale trade.....	-1.9	-9.4	+1.9	-15.9
Hotels and restaurants.....	+1.1		-6.5	

¹ Identical establishments.

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF PAY ROLL IN VARIOUS INDUSTRIES IN WISCONSIN FROM FEBRUARY, 1924, AND JANUARY, 1925, TO FEBRUARY, 1925—Continued

Kind of employment	Per cent of increase (+) or decrease (-)			
	January to February, 1925		February, 1924, to February, 1925	
	Employment	Pay roll	Employment	Pay roll
<i>Nonmanual</i>				
Manufacturing, mines, and quarries.....	0.0	-0.6	+0.6	+7.5
Construction.....	.0	.0	-4.5	-16.0
Communication.....	+1.1	+2.7	+2.0	+5.4
Wholesale trade.....	+2.4	+5	+6.7	+6.6
Retail trade (sales force only).....	-1.7	-1.5	+1.3	+6.5
Miscellaneous professional services.....	+3	+8	+4.6	+24.2
Hotels and restaurants.....	.0	-----	-1.5	-----

Placement of the Deaf in North Carolina, 1923-24¹

THE North Carolina Legislature of 1923 provided for the establishment of a bureau of labor for the deaf, and in April, 1923, this bureau began its work. Its prescribed duties are to take a census of the deaf and to secure facts, information, and statistics as to their condition, and as to conditions of labor, employment, and education of the deaf in other States, with a view to promoting the general welfare of such persons in North Carolina. The bureau has carried on a campaign of education to convince employers that there are many positions that can be filled by capable deaf persons to the satisfaction of any considerate employer, and has endeavored to place the deaf in positions to fit their peculiarities of body and mind, and which will be satisfactory to them.

A questionnaire was sent to all the known deaf in the State (1,189) requesting information along various lines, but only 342 blanks were returned filled in, and of these, 221 were sent by persons in need of help. It was found, however, that, due either to lack of education regarding the capability of the deaf or to prejudice on the part of the employer, there was little demand for their services. The following table shows the number referred to positions, the number placed, and those unplaced, classified by industry and occupation:

PLACEMENT OF THE DEAF IN NORTH CAROLINA, APRIL 1, 1923, TO OCTOBER 1, 1924, BY INDUSTRY AND OCCUPATION

Industry and occupation	Number referred to positions	Number placed in employment	Number unplaced
Agriculture: Farm hands.....	7	2	5
Building and construction:			
Carpenters.....	32	14	22
Painters, paper hangers, etc.....	8	1	7
Bricklayers.....	2	1	1
Building trade helpers.....	4	2	3
Clerical:			
Bookkeepers.....	4	-----	4
Typists.....	2	1	1
Office clerks.....	3	1	2

¹North Carolina. Department of Labor and Printing. Thirty-fourth report, 1923-1924. Raleigh, 1924.

PLACEMENT OF THE DEAF IN NORTH CAROLINA, APRIL 1, 1923, TO OCTOBER 1, 1924,
BY INDUSTRY AND OCCUPATION

Industry and occupation	Number referred to positions	Number placed in employment	Number unplaced
Clothing and textiles:			
Hand-sewing trades.....	14	6	9
Tailors.....	2		2
Power-machine operators.....	2	2	
Shirt, collar, and cuff workers.....	2	1	1
Textile workers.....	30	17	11
Mill helpers.....	3	2	1
Domestic and personal service:			
Domestics.....	8	1	8
Laundry, cleaning, and dyeing.....	1	1	
Food, beverages, and tobacco:			
Confectionery workers.....	2	1	1
Cigar, cigarette, and tobacco workers.....	17	7	9
Ice-cream factory helpers.....	1	1	
Hotels and restaurants:			
Cooks.....	2		2
Kitchen workers.....	1		1
Leather, rubber, and allied products: Shoe workers.....	4	1	3
Lumber: Woods laborers.....	1	1	
Metals and machinery:			
Auto garage workers.....	4	1	4
Machinists.....	1	1	
Motion-picture operators.....	1		1
Paper manufacture: Paper box and bag workers.....	3		3
Printing trades:			
Printers and pressmen.....	15	5	12
Feeders and bindery workers.....	4	2	4
Professional and technical: Teachers.....	3	2	1
Woodworking and furniture:			
Cabinetmakers and furniture finishers.....	2	1	1
Machine woodworkers.....	3	3	
Coffin makers.....	2	2	
Miscellaneous:			
Barbers.....	1		1
Salve factory workers.....	1		1
Newspaper agents.....	1	1	
Common labor.....	1		1
Casual workers.....	5		5
Total.....	199	81	120

Except in the case of printers and carpenters the record shows that the men take up whatever work they can find; the women prefer factory work and do not care much for domestic work. There was a large number of unskilled applicants, only a small proportion of whom secured work and that with difficulty, for the reason that they are deficient in shop language, which handicaps them in understanding orders. In the clerical and professional field the deaf find it difficult to obtain work because hearing is necessary in such occupations.

Unemployment in Foreign Countries ¹

SINCE the last publication in the MONTHLY LABOR REVIEW (February, 1925, pp. 145-157) of data on unemployment in foreign countries the employment curve in practically all countries has undergone a more or less marked depression. The only exceptions are in Germany, Switzerland, and Canada, but the improvement of the labor market even in these three countries was very

¹ Except where otherwise noted, the sources from which this article is compiled are shown in the table on pp. 164 and 165.

slight. As a rule, unemployment increases in all countries during the winter months, because most outdoor industrial activities come to a temporary standstill. The present slump in the European labor markets is, however, not due solely to seasonal influences. The general credit stringency, the abnormal condition of the State finances of certain countries, and the decreased purchasing power of the great mass of the population due to high cost of living and low wages, all played a considerable rôle in the recent unfavorable development of the labor markets abroad. In one country, Austria, unemployment has in recent months attained alarming proportions, the unemployment figures for January exceeding all previous high records for that country. In Poland, unemployment is also increasing from week to week. That the general industrial situation is not very promising in Europe at the present time is indicated by the fact that even in France, where unemployment was practically nonexistent during the past year, symptoms of a business depression have been observed.

Briefly summarized, the situation in the individual countries at the latest date for which data are available is as follows:

Great Britain.—In describing the employment situation in February, the Ministry of Labor Gazette states that:

Employment showed little change on the whole during February. There was a slight improvement in the building, engineering, and clothing trades, but a decline in coal mining, and in the wool textile, and linen industries. Employment was good on the whole with skilled operatives (except painters) in the building trades, in some branches of the cotton industry, and in the brick and jute trades; it was fairly good with coach builders and mill sawyers, and in the furnishing, silk, and carpet trades. In coal mining, in the wool textile industry, and in the section of the cotton industry spinning American cotton it was slack; in the iron and steel industry, in tinplate manufacture, and in the marine engineering and shipbuilding trades it continued bad.

Among workpeople covered by the unemployment insurance acts, numbering approximately 11,500,000, and working in practically every industry except agriculture and private domestic service the percentage unemployed at February 23, 1925, was 11.6, compared with 11.5 at January 26, 1925, and 10.7 at February 25, 1924. * * * Among members of trade-unions from which returns were received the percentage of unemployed was 9.4 at the end of February, 1925, compared with 9 at the end of January, and with 8.1 at the end of February, 1924. The total number of persons (insured and uninsured) registered at employment exchanges in Great Britain and Northern Ireland as unemployed at February 23, 1925, was approximately 1,287,000, of whom 980,000 were men, and 239,000 were women, the remainder being boys and girls; at January 26, 1925, it was also 1,287,000, of whom 969,000 were men and 243,000 were women; and at February 25, 1924, it was 1,192,000, of whom men numbered 878,000 and women 241,000.

A report from the American commercial attaché at London dated February 28 (Commerce Reports, March 9, 1925, p. 542) states:

February business was characterized by hesitancy and a slowing down that is believed to be temporary, following the November-December improvement. This lull [was] caused by political and actual increased continental competition in coal, iron, and steel; by the weakening sterling exchange, the uncertainty as to the date of return to the gold standard, and the further course of British-American price levels and interest rates; and, finally, by the early but unsettling maneuvers in wage discussions in the coal, engineering, shipbuilding, and railway industries. The general lull in activity is evidenced by reduced coal exports, low production in the iron and steel and shipbuilding industries, shorter hours of cotton spinning, and nonreduction in total unemployment.

The coal industry remained depressed throughout February, although the average production was maintained in spite of delay in the expected improvement in domestic manufactures that require coal. * * * The iron and steel demand

generally is slack in all lines except Sheffield acid steel. * * * New orders for ships continue to diminish and shipbuilders are urging the Government to build warships in advance of their program, instead of paying unemployment insurance.

Automotive sales were retarded by bad weather and were below the average. * * * Light car manufacturers are fully engaged; heavy type fairly stationary. * * * Some slackening in the motor cycle trade is possible as a result of the increasing popularity of the light car.

Reduced operations in Lancashire have strengthened the spinners' position. Yarn and cloth prices are firm; raw-cotton prices are steady; cotton goods exports are fair; but orders from major markets are lacking. The dyestuffs industry is on a hand-to-mouth basis, pending the settlement of the question of reparations dye delivery.

The hide and leather trade is less active. * * * Department stores and cooperatives report excellent results in retail trading in 1924.

Irish Free State.—Reporting on the economic situation in the Irish Free State the American consul at Dublin, under date of January 20, 1925, states that the labor situation remains unsatisfactory. The year closed with about 41,000 registered as unemployed and with a number of labor disputes unsettled. In an effort to relieve the distress attending unemployment the Government, on December 5, made a grant of £250,000 to be spent chiefly in providing work in the rural districts. In addition, the unemployment insurance act of 1924 was extended so as to provide relief for 46,341 unemployed for 21 weeks from October 30, which it was estimated would cost about £370,000. At the time of the extension of the act the insurance fund was in debt some £1,000,000 owing to the decrease in contributions following the increase in the unemployment rate from the normal 7 per cent of the insurable population to 18 per cent.

In general trade conditions a slump prevails tending toward uncertainty and caution. The subnormal crop has had a depressing effect. The increase in prices of farm products failed to improve appreciably the condition of the agricultural community as a whole, owing to the continued high prices of manufactured articles, heavy transportation costs, high taxes, and a shrinkage in cross-channel demand for Irish farm produce.

The existing stagnation is reflected in the decreased purchasing power of the country. Agricultural implement dealers are feeling its effects and the automotive trade has not been so active, this, however, being partly seasonal. Trading in lumber and building supplies has been dull, but owing to increased building activity under public support the outlook is promising.

The expansion of domestic industries, as the result of the protective duties on boots and shoes, confectionery, soaps, and candles continued throughout the last quarter of 1924.

Germany.—The Reichsarbeitsblatt, the official bulletin of the Federal Ministry of Labor, in its issue of March 8, 1925, summarizes the situation in February as follows:

Employment in industry has generally continued to improve slightly during February. A slump has been reported only by the coal-mining industry and by individual establishments in a number of other industries, especially the food and tobacco industries. The narrow range open to German industry for its development again makes itself felt. An increasing number of reports have been received pointing out a slowing down in the payment of bills due and a hesitancy on the part of the trade and of consumers in making purchases. The metal-working industries expect a sudden stoppage of orders. As in preceding months, orders received by industrial establishments are almost without exception of domestic origin. Export business, on the whole, has not been stimulated.

The Reichsarbeitsblatt received returns on the state of employment in February from 3,023 typical industrial establishments employing 1,330,000 persons. The per cent of workers employed in establishments reporting poor employment decreased from 28 in January to 26 in February, that of workers employed in establishments reporting fair employment fell from 47 to 45, and that of workers employed in establishments in which employment was reported as good rose from 25 to 29. The reports of the State employment offices also indicate a slight general improvement of the labor market, chiefly due to increased employment in the metal-working, woodworking, and clothing (except shoes) industries. The improvement is, however, also due to increased employment in outdoor occupations (agriculture, building, quarrying, etc.).

A report of the American commercial attaché at Berlin, dated March 13, 1925 (Commerce Reports, March 23, 1925, p. 672), states:

The recent business activity [in Germany] now shows signs of slackening as evidenced by the unsatisfactory volume of foreign and domestic sales at the Leipzig International Fair of March 1 to 11. High prices, from 10 per cent to 15 per cent above the level of the previous fall fair, resulted in poor foreign sales in all but a few lines and in small domestic orders that were confined principally to retail stocking. Recent decline in world grain prices and the prospects of further drops in basic iron prices have resulted in the refusal to make long-term buying commitments. The steel production of the Raw Steel Cartel for March has been fixed at 15 per cent of the normal quota. Reduced consumption, in addition to unusually good winter weather, has left Ruhr coal stocks on hand amounting to 8,500,000 tons.

Increased production in Germany during the past year has resulted in accentuating the labor unrest in the major German industries. The situation was brought to a head by the termination of labor agreements in the most important industries on March 1. The improving position of labor is shown by the decline in unemployment figures during the past year from 26 per cent to 8 per cent and in part-time unemployment from 23 per cent to 6 per cent.

The following employment statistics published in the March 8, 1925, issue of the Reichsarbeitsblatt and covering the month of January are the most recent statistics available.

Returns from trade-unions show on the whole unchanged conditions as compared with December, 1924. Out of 3,523,861 members covered by the 40 federations making returns, 283,797 or 8.1 per cent, were unemployed on January 31, 1925, as compared with 8.1 per cent on December 27, 1924, and 26.5 per cent at the end of January, 1924. These figures relate to members wholly unemployed. In addition, returns from 34 federations covering 3,000,000 members, in round figures, show that 166,476, or 5.5 per cent, were working short time at the end of January, as compared with 6.5 per cent at the end of December, 1924, and 23.4 per cent at the end of January, 1924. The average time lost per short-time worker has also decreased considerably.

The number of totally unemployed persons in receipt of unemployment doles throughout Germany, inclusive of the occupied area, fell from 586,742 on January 15, 1925, to 575,555 on February 15, 1925. These totals show only the number who have fulfilled the conditions entitling them to unemployment benefits under the regulations of February 16, 1924, and not all persons unemployed in Germany.

Returns from employment exchanges show that the number of applicants for work increased from 1,306,733 in December, 1924, to 1,491,170 in January, 1925, or 14.1 per cent, but the vacancies reported by employers increased at a still greater rate, namely, from 386,362 to 474,571, or 22.8 per cent. For every 100 vacant situations for men there were on an average 403 applications, and for

every 100 for women, 172 applications; in December, 1924, the corresponding figures were 404 and 206.

According to the monthly reports of the sick funds, the number of members paying contributions on February 1, 1925 (and therefore assumed to be working), showed an increase of 0.3 per cent over the preceding month.

France.—Although unemployment continues to be negligible in France, there has been a slight increase in the number of unemployed in recent months. On March 19, 1925, there were 1,030 persons in receipt of unemployment benefits from departmental and municipal unemployment funds, as compared with 500 on December 11, 1924. The number of persons on the live register of public employment exchanges has also increased. On March 14, 1925, they numbered 13,968 as compared with 12,409 on December 6, 1924.

Two reports from the American commercial attaché at Paris, dated February 8 and March 7, 1925 (Commerce Reports February 16, 1925, p. 362, and March 16, 1925, p. 608), indicate "hesitancy" in French industries. It is stated that there is a general slackness and increasing idleness in the wool combing and spinning plants, a one-day week being worked in many factories. Spinners of carded wool are busy, stocks of yarn are low, and the condition of the weaving industry is satisfactory. Cotton spinners and weavers still have good advance orders, but few new orders are being received. The silk industry is reported to be satisfactory, but buyers are hesitant, and the outlook is below expectations; the artificial-silk trade is active. Business in linen yarns is slow and in cloth is extremely dull, with the outlook discouraging. There is increased dullness in the lace industry, but trade in tulles is fair and in embroideries good.

The iron and steel market is nervous, owing to the high German tariffs that have been in operation since January 10, to rising costs, and to restricted orders.

The leather industry is depressed as a result of the relative shortage of money and the high cost of living. Shoe factories and retail shoe stores find business dull, and there is partial idleness in some factories. The belting industry is having labor troubles; other industrial leather manufacturing is very calm.

The demand for industrial coal is moderate, and that for domestic coal continues weak. January production of coal and lignite showed a considerable increase over December and November, but coke and briquettes showed little change.

Agricultural-machinery factories are well occupied. * * * The industrial-machinery market is improved. Manufacturers are placing funds in plant improvement because of currency depreciation. The cessation of imports from Germany has reacted favorably for French manufacturers. The electrical-equipment industry is active, with good domestic and foreign sales.

The output of the French automotive industry is well below the capacity of the plants. Large-scale producers of small cars are reported to have heavy stocks on hand, and the forecast for 1925 production is below last year's figure.

The condition of growing wheat is reported to be fair and the general agricultural situation satisfactory.

Belgium.—In recent months there has been a considerable increase in the amount of unemployment in Belgium. The latest unemployment statistics available relate to January. Returns received by the Ministry of Industry and Labor from 1,380 approved unemployment insurance funds, with a total membership of 633,406, show that 38,516 of the members were either totally or partially unemployed at the end of the month. The total days lost through unemployment in January numbered 564,577, or 3.76 per cent of the aggregate pos-

sible working days; in the preceding month the percentage was 1.64, and in January, 1924, it was 2.30.

According to two reports from the American commercial attaché at Brussels, dated February 13 and March 13, 1925 (Commerce Reports, February 23, 1925, p. 424, and March 23, 1925, p. 671), Belgian industrial activity has been declining in recent months.

The larger [iron and steel] mills are still buying raw materials for completion of the remaining orders received during December and January, although few new orders are being received and all markets are inactive. Production will probably decline unless the expected exhaustion of consumers' stocks should bring relief. Oriental orders have decreased. * * * German and French competition is keen.

Cotton-spinning mills are concerned at the absence of new orders. * * * Flax spinners are suffering from French underbidding, and linen looms are 50 per cent idle, with a weavers' crisis threatened.

Plate-glass production continues at 50 per cent capacity * * *. Window-glass production has been reduced, in keeping with the diminishing demand during February.

The crisis in the coal market continues, with stocks at 2,000,000 tons, representing an idle capital of 150,000,000 francs. With continuing curtailment of production, the unemployment of mine and surface workers is increasing.

The Netherlands.—According to the Central Bureau of Statistics of the Netherlands, 32,031 members of unemployment funds, or 11.8 per cent of the total membership, were wholly unemployed on January 31, 1925, and 7,787 or 2.9 per cent were partially so. The corresponding percentages on December 27, 1924, were 10.9 and 2.6, respectively. Employment exchanges also report a slight increase in the number of applicants on the live register, these numbering on January 31, 1925, 88,851, as against 86,977 on December 31, 1924, and 117,474 on January 31, 1924.

A report of the American commercial attaché at The Hague, dated March 13, 1925 (Commerce Reports, March 23, 1925, p. 672), describes Netherlands' industries as active on the whole. While certain sections of the cotton industry are rather slack, spinners are generally well provided with orders, and a yarn shortage is inducing manufacturers to extend operations and to construct new spindles. Conditions in the wool manufacturing industry have become less favorable. On March 1 the coal mines reduced prices considerably and the miners are now protesting against the 10 per cent wage reduction which is proposed for April 1.

Switzerland.—According to the Federal Labor Office the Swiss labor market underwent a slight but marked improvement in February. The number of persons registered at public employment exchanges fell from 12,184 on January 31, to 11,834 on February 28, or 3 per cent. During the same period the number of vacant positions reported by employers rose from 2,387 to 3,103, or 30 per cent. With respect to the decrease in the number of applicants for work it should be noted that a decrease took place only among male applicants, especially among unskilled workers, while the number of female applicants increased considerably, particularly those seeking employment in the clothing, cleaning, and textile industries.

Considered by industry and occupational groups, the building trades, the hotel and restaurant trades, agriculture, woodworking, the glass industry, and domestic service showed the greatest improvement, which was mainly seasonal. In the textile, clothing, and cleaning industries the labor market continued slack.

Italy.—In its most recent report on the employment situation the unemployment insurance division of the Italian National Social Insurance Institute reports an increase of 10.79 per cent in the number of totally unemployed at the end of December, 1924, as compared with the end of November. The totally unemployed numbered 150,449 (113,777 men and 36,672 women) at the end of December, as against 135,785 (105,333 men and 30,452 women) at the end of the preceding month. In addition there were 9,956 short-time workers, as against 14,462 in November. When it is remembered that in January, 1922, the number of totally unemployed in Italy was 606,819, it will be seen that unemployment is now only one-fourth as extensive as it was three years ago. The report also shows that 15,094, or only about 10 per cent of the totally unemployed in December, 1924, received unemployment benefits. Since the largest number of unemployed is now to be found in building and construction work (36,663) and in agriculture (36,142), the increase in unemployment in December, 1924, was chiefly due to seasonal influences.

In a cable dated February 28, 1925 (Commerce Reports, March 9, 1925, p. 543) the American commercial attaché at Rome reports continued industrial expansion in Italy.

All branches of industry continue the strong trend of recent months. The electric-power shortage in northern Italy has been relieved by abundant rainfall, making possible the resumption of a normal working schedule. The shortage of skilled labor in the industrial regions is increasing, and manufacturers are granting higher wages. [A strike in the Lombardy metal-working industries, which at its height involved 120,000 men, has been terminated. In some industries, there have been voluntary increases of wages in order to preclude the probability of further labor troubles.] The seasonal increase in unemployment continues to be less pronounced than in the winters of previous years. On January 31 [1925], the number of unemployed was 156,000. * * * The increase from December, 1924, was only 6,000, as compared with 23,000 in the preceding year.

Industrial requirements of iron and steel are reported to exceed domestic production, in spite of the gradual increase in output. Provisional figures for 1924 show an advance of 13 per cent over 1923 in the production of pig iron and a decline of 3 per cent in steel production. The engineering trades are expanding.

Satisfactory conditions prevail in all branches of the textile industry. The consumption of raw cotton is heavy, and the demand for finished goods is constant. Large imports of Australian wool have increased the activity in wool combing, and weavers are working on a good volume of orders for the summer season. * * * The artificial silk industry is manifesting notable activity, and large increases in production are planned.

Tanners report that demand is favorable but that their margin of profit is still limited by high cost of hides, despite the recent advances in leather prices.

The area planted to wheat this year shows an increase of 3.4 per cent over last year. Rye acreage is unchanged. Cereal crops have greatly benefited by recent rains and are now in average condition. The prospect for the almond crop is doubtful.

Denmark.—A report of the American commercial attaché at Copenhagen, dated February 20, 1925 (Commerce Reports, March 2, 1925, p. 488) states:

Developments during the past month have given evidence of a favorable reaction to the recently adopted stabilization measures. * * * As a result confidence is gaining ground, and the outlook with respect to trade, industry and finance is now more promising than for several years past. Output of farm products remains high, despite the prevalence of hoof-and-mouth disease; the industrial situation is encouraging.

With the prevailing mild weather unemployment has already commenced to decline and now amounts to 44,000 as against 55,000 on the same date a year ago,

reflecting a satisfactory degree of activity in most industries. The labor outlook is somewhat obscured, as a large number of wage agreements have expired and only a few new contracts have been closed. In some instances wage negotiations have been severed.

In spite of a very mild winter, the situation in the freight market is unsatisfactory and 9,600 gross tons of shipping have been laid up. The shipbuilding industry, however, is very active, and several new foreign contracts have been signed.

The most recent unemployment statistics published by the Danish Statistical Office show that on February 27, 1925, 16.6 per cent of a total of 260,827 workers covered by returns of the trade-unions and of the Central Employment Exchange were unemployed, as against 16.3 per cent at the end of January, 1925, and 21.9 per cent at the end of February, 1924. Unemployment in Copenhagen, the capital city, has slightly decreased, but in the Provinces it has increased considerably during recent months. Unemployment in Denmark is now at practically the pre-war level (1910-1913).

Norway.—A cable from the American trade commissioner at Copenhagen, dated March 26, 1925 (Commerce Reports, April 6, 1925, p. 13), states that Norwegian industries are now operating on full time.

Public attention during the past month has been focused mainly on the labor situation. Wage negotiations involving 65,000 workers have been under discussion and the Government proposal for slight wage increases was finally accepted by both parties and labor conflicts were definitely averted. The general industrial revival that has been in evidence since the latter part of 1924 thereupon received further impetus and crystalized the prevailing impression that the current year will be one of marked prosperity.

With the amicable settlement of wage disputes, all obstacles to further industrial progress have been eliminated. The Norwegian lumber, wood-pulp, and paper industries have been stimulated by the increased demand resulting from the temporary standstill of Swedish mills. The fish-canning and the metal and mining industries are also reported on full-time operation. Unemployment declined during the month and stands now at 21,000.

Sweden.—According to the monthly report of the State unemployment commission, there were 12,589 unemployed persons requiring relief on its register at the end of December, 1924, as compared with 9,268 at the end of the preceding month. Trade unions reported 15.6 per cent of their members unemployed on December 31, 1924, as against 10.5 per cent at the end of November, 1924, and 14.1 per cent at the end of December, 1923.

The American commercial attaché at Stockholm reports under date of March 19, 1925 (Commerce Reports, March, 30, 1925, p. 741) that labor conflicts are depressing Swedish conditions.

Widespread labor disputes in Swedish industries relative to wage readjustments could not be averted and have now reached their climax in a general lockout put into effect by the employers' association on March 16. Previous attempts at arbitration by the Government mediator resulted in temporary postponement only, as the differences were apparently irreconcilable. The resulting conflict is said to be the largest since 1909 and involves 130,000 workers. The chief cause of the difficulty was the dispute in the paper industry, where a wage increase of 40 per cent was demanded by the workmen. The decision of the labor leaders against the declaration of a general strike can presumably be taken as an indication that a settlement is desired.

As now in effect the dispute embraces engineering and machinery plants with 40,000 workers, textile mills with 28,000, sawmills with 23,000, wood-pulp mills with 15,500, paper mills with 12,500, and several minor trades with 11,000 workers.

Heavy losses have already been sustained in a number of instances by the industries involved, and trade is suffering.

A later cable (Commerce Reports, April 6, 1925, p. 5) states that "the labor conflicts which have seriously disrupted Swedish industries appear to have been terminated by an agreement which affects all existing lockouts and strikes. Work is to be resumed immediately, although but slight changes in wages have been effected."

Finland.—The American trade commissioner at Helsingfors reports (Commerce Reports, March 30, 1925, p. 740) a lull in Finnish business. Business is always slack there at this time of the year, but the condition this year has been somewhat accentuated by the practical absence of snow in the forests, thus curtailing logging activities. Advance lumber sales are progressing favorably. The wood-pulp and paper industries are reported to be active.

The Bank of Finland Monthly Bulletin shows, in a table prepared from reports of the labor exchange department of the Ministry of Social Affairs, that the number of unemployed registered at communal labor exchanges was 4,896 at the end of January, 1925, as compared with 2,234 at the end of December, 1924, and with 1,615 at the end of January, 1924. In summarizing the employment situation the bulletin says:

Partly on account of the absence of snow and partly for other reasons, including a slackening in building activities, serious unemployment began to appear in Finland in January. For many years there have not been so many applicants for work as in the present winter. It has not proved necessary for the Government to take any steps to relieve the situation, the municipalities having so far been able to supply at least the majority of the unemployed with work. No further increase in the number of unemployed was reported during the first half of February.

Latvia.—During a debate on unemployment in the Latvian Saeima on February 20, 1925, the Minister of Labor stated that there were at the time in Latvia about 10,000 unemployed, of whom 3,500 were employed by the State on relief work. In his opinion this unemployment was due to the difficult conditions of the winter season. At the end of the debate the Saeima adopted a motion submitted by the Social Democrats, urging the Government to prepare a bill instituting a system of unemployment insurance at once.

Poland.—Beginning with November of last year the unemployment statistics compiled by the Polish Central Statistical Office show a slow but continuous increase in unemployment from week to week. On February 21, 1925, the number of unemployed registered at public employment exchanges was 181,640, as against 172,420 on January 24, 1925, and 147,065 on October 25, 1924. The number of persons in receipt of unemployment benefits on February 21, 1925, was 82,189.

In spite of the steady increase in unemployment, which is probably due to deflation, the American commercial attaché at Warsaw reports, under date of March 12, 1925 (Commerce Reports, March 23, 1925, p. 674) that owing to the loan recently floated in America the financial stringency has been relieved and industrial conditions show improvement. The most marked improvement is noted in the textile industry, which is attributed to seasonal buying, new foreign credits, and better factory organization. Operation on a six-day week schedule has been resumed, but competition from

Czechoslovak textile concerns is still felt. The iron and steel industry has been stimulated by Government buying, and several blast furnaces have resumed operations, there being now 10 operating on full or part time. The lack of snow during the winter is causing anxiety for the fall-sown crops.

Czechoslovakia.—The American consul at Prague reports, under date of February 24, 1925, that unemployment in Czechoslovakia continued to increase in January, 1925. The number of totally unemployed in receipt of Government subsidies was 15,460, as compared with 11,483 in December, 1924. Family dependents to the number of 18,550 also received subsidies from the Government in January, as against 13,480 in the preceding month. The unemployed receiving Government subsidies in January were distributed as follows: Bohemia, 7,540; Moravia and Silesia, 3,970; Slovakia and Russia, 3,950. In addition to the number of totally unemployed persons, 11,460 partially employed workers with 6,220 dependents, received assistance through their employers, as compared with 9,500 workers in December, 1924.

It is reported in the *Slovensky Slovo* that 7,000 Government employees in Slovakia are to be discharged. It is understood that this is the beginning of an effort by the Government to reduce the number of its employees throughout the country, as the Government offices have been overstaffed. This reduction is apt to lead eventually to a reduction in the number of Government officials on the railways and in other establishments operated by the Government.

The ammunition factory at Brno, because of limited production, has given notice to 250 of its employees, and between 10 and 15 per cent of the workmen employed in the production of cigars have been discharged as Czechoslovak Tobacco Monopoly is oversupplied with cigars.

Employment in the textile industry continued good during the month under review, although this industry, as well as others is badly affected by increased cost of production. In order to keep their factories in operation, it is frequently necessary for manufacturers to export at a loss.

Austria.—The most recent official unemployment statistics available for Austria show that on January 31, 1925, the number of unemployed in receipt of unemployment benefits had reached the enormous figure of 187,070. If it be considered that, owing to restrictive provisions of the Austrian unemployment insurance law, the total number of unemployed persons must be well in excess of 200,000 and that the total number of persons gainfully employed in industry and commerce is estimated to be about 1,300,000, it is seen that more than 15 per cent of these persons are now out of work. At the end of December, 1924, the unemployed numbered 154,493. On February 15, 1925, there were in Vienna alone 103,731 applicants for unemployment benefits. Unemployment seems to be most extensive among metal workers and private salaried employees, and in the building trades and the clothing industry.

A report of the American commercial attaché at Vienna, dated March 21, 1925 (*Commerce Reports*, March 30, 1925, p. 740), states that unemployment in Austria had apparently reached its peak at the end of February, when 190,000 persons were receiving unemploy-

ment benefits. The number of unemployed is now slowly declining and may be expected to decrease rapidly with the coming of spring and the revival of seasonal employments.

Hungary.—The most recent statistics published by the Hungarian Statistical Office, which relate to December, show that of the total membership of the Hungarian Social-Democratic trade-unions 33,095, or 17.3 per cent, were unemployed on December 27, 1924, as against 30,568, or 16 per cent, on November 29. Of the above number of workers unemployed on December 27, 19,106 resided in Budapest, the capital, and 13,989 in the Provinces. The Statistical Office ascribes the increase in unemployment to general stagnation of industry and commerce, the seasonal stoppage of building activities, and the discharge of salaried employees. It is widely felt that a period of extensive liquidation will be inevitable before sound business conditions can become general.

Textile mills are working full time. The iron and metal industries, however, continue to be seriously depressed.

Portugal.—A report of the American consul at Oporto, dated January 22, 1925, states that as a result of the industrial crisis which prevailed during quarter ended December 31, 1924, unemployment has reached a level hitherto unknown in the district of Oporto. The Union of Workmen's Syndicates estimates the number of unemployed in the city of Oporto alone to be 14,000, and states that in other industrial centers in this district unemployment is as extensive as in Oporto.

Various plans for relieving the unemployment situation have been proposed, including the employment of a large number of the unemployed on the construction work being done at the seaport of Leixões, the sea harbor of Oporto. None of these plans has, however, been put into effect and the suffering among the unemployed has been intense. It is stated that in the Provinces a number of the unemployed factory workers are returning to agricultural pursuits which many of them left to enter the factories.

Canada.—The Dominion Bureau of Statistics reviews the March employment situation as follows:

The trend of employment at the beginning of March was favorable; the upward movement, though rather slight, contrasts with a downward tendency indicated on the same date of last year. The Dominion Bureau of Statistics received returns from 5,696 firms, employing 715,158 persons, or 6,921 more than were on their pay rolls on February 1. The index number, reflecting this comparatively small increase, rose from 86.1 in the preceding month to 87.0 on March 1, as compared with 90.7, 89.9, 81.9, and 88.0 on March 1, 1924, 1923, 1922, and 1921, respectively.

Manufacturing was decidedly more active, but employment in other divisions on the whole showed declines, partly seasonal in character.

Firms in all except the prairie Provinces reported improvement; the gains in Ontario were most extensive. In the Maritime Provinces employment in manufactures, particularly in the iron and steel and food groups, increased substantially while there was also greater activity in coal mining on March 1 than in the preceding month. Construction, however, was slacker. Statements were tabulated from 500 employers, whose pay rolls aggregate 60,832 as compared with 58,998 on February 1. Reductions in personnel were registered at the beginning of March, 1924. In Quebec logging and construction showed curtailment, but there were gains in manufacturing, notably in textile, iron and steel, pulp and paper and lumber factories. The result was an increase of 1,243 persons on the staffs of the 1,225 reporting firms; they employed 196,818 workers on March 1. In Ontario, 5,681 persons were added to the working forces of the

2,608 employers whose returns were tabulated, and who had 301,265 employees on the date under review. Iron and steel showed marked expansion, while improvement was also noted in textiles and other branches of manufacturing, and in transportation, mining and construction. Logging, on the other hand, was seasonally less active; trade and communication also registered reductions. Employment on March 1, 1924, had declined. In the Prairie Provinces there was a generally unfavorable movement; manufacturing, logging, mining, transportation, construction and trade all recorded curtailment, in some cases of a seasonal character. Reports were compiled from 771 firms, employing 90,621 workers as compared with 94,161 on February 1. This contraction is slightly larger than that indicated at the beginning of March, 1924. In British Columbia, manufacturing reported increased activity, the lumber industry showing the greatest gains. Logging, highway construction, and transportation also afforded considerably more employment than in the preceding month, while trade and railway construction were slacker. A combined pay roll of 65,622 persons was employed by the 592 firms whose returns were received; on February 1 they had 63,919 employees.

In manufacturing industries the 3,701 manufacturers reporting had 402,539 persons in their employ, an increase since the preceding month of 13,210 workers, which exceeded the gains registered on March 1 of 1924 or 1923. Iron and steel recorded the greatest improvement; automobile, rolling, heating appliance, ship-building and agricultural implement works, in particular, showed marked recovery. Lumber, sugar, biscuit, confectionery, textile and nonferrous metal product factories also indicated considerable increases. Meat slaughtering and packing establishments reported the only large reductions in this division. Logging, except in British Columbia, showed seasonal losses, according to returns from 225 firms employing 32,166 persons, as compared with 34,542 on February 1. Curtailment was noted in the Western coal fields, while coal mines in the Maritime Provinces and metal mines in Ontario and British Columbia afforded more employment on March 1. Statements were tabulated from 202 mine operators, whose working forces aggregate 43,093, or 66 less than in the preceding month. Telephones showed further declines, but no change was indicated in telegraphs; 164 firms in this group employed 21,837 persons, as compared with 22,109 in their last report. Steam railway operation in the Prairie Provinces was slacker, while shipping in British Columbia was more active. The result was a decrease of 712 persons in the staffs of the 262 transportation firms reporting, who employed 98,909 workers. Building construction showed improvement, but there were contractions in highway and railway construction. A combined working force of 48,606 persons was employed by the 391 contractors making returns; on February 1 they had 50,133 employees. Trade, both retail and wholesale, showed a falling off. The pay rolls of the 582 establishments whose reports were compiled, declined from 56,215 workers in the preceding month to 54,970 on March 1.

Japan.—Under date of February 10, 1925, the American consul at Tokyo reports considerable unemployment in that city. The Chugai Shogyo, a Tokyo newspaper, estimates that the number of unemployed in the city in January was 30,000, while the Imperial Department of Finance estimates that the retrenchment policy of the Government will have resulted in the dismissal of 39,553 Government employees during the fiscal year ending March 31, 1925.

Commenting on the situation, the local press attributes this widespread unemployment not only to the industrial depression, but to the tendency of labor to desert the farms, where living conditions are hard and rewards meager, for the cities and industrial centers. Some journals recommend that the situation be relieved by encouraging emigration to Manchuria and Mongolia. Others advocate the introduction of new home industries among the farming population in order to provide the farmers with remunerative employment during the winter months and so prevent the rush of the farming class to the cities.

A summary of the latest statistical reports on unemployment abroad is given in the table following.

Sweden	Dec. 31, 1924	12,289 unemployed persons (report of State Unemployment Commission).	Sociala Meddelanden, No. 2, Stockholm, 1925.	The corresponding figure for the end of November, 1924, was 9,268.
Do	do	15.6 per cent of trade-union members.	do	The corresponding per cent at the end of November, 1924, was 10.5, and at the end of December, 1923, 14.1.
Finland	Jan. 31, 1924	4,986 unemployed (3,481 men and 1,415 women) registered at communal employment exchanges.	Bank of Finland Monthly Bulletin, Helsingfors, February, 1925.	At the end of December, 1924, the number of unemployed was 2,234, and at the end of January, 1924, 1,615.
Latvia	Feb. 20, 1925	10,000 unemployed.	Industrial and Labor Information, Geneva, Mar. 16, 1925.	Of the 10,000 unemployed, 3,500 were employed by the State on relief works.
Poland	Feb. 21, 1925	181,640 unemployed persons.	Wiadomości Statystyczne, Warsaw, Mar. 3, 1925.	The corresponding number on Jan. 24, 1924, was 172,420, and on Jan. 31, 1924, 100,530.
Do	do	82,189 persons in receipt of unemployment relief.	do	The corresponding number on Jan. 24, 1924, was 77,491.
Czechoslovakia	Dec. 31, 1924	81,040 persons unemployed.	International Labor Review, Geneva, March, 1925.	The corresponding number at the end of November, 1924, was 69,965, and at the end of December, 1923, 191,978.
Do	Jan. —, 1924	15,460 totally unemployed persons received unemployment doles from the Government and 11,460 short-time workers received subsidies from their employers.	Report from the American Consul at Prague, Feb. 24, 1925.	In December, 1924, the number of totally unemployed persons in receipt of Government doles was 11,483, and that of short-time workers receiving grants from their employers, 9,500.
Austria	Jan. 31, 1925	187,070 totally unemployed persons in receipt of unemployment relief.	Statistische Nachrichten, Vienna, Feb. 25, 1925.	The corresponding figure at the end of December, 1924, was 154,493.
Hungary	Dec. 27, 1924	33,095, or 17.3 per cent, of the members of the Social-Democratic trade-unions.	Magyar Statisztikai Szemle, Budapest, November-December, 1924.	The corresponding figure on Nov. 29, 1924, was 30,568, or 16 per cent.
Portugal	Dec. 31, 1924	14,000 unemployed in the city of Oporto.	Report from the American Consul at Oporto, Jan. 22, 1925.	
Canada	Jan. 31, 1925	10.2 per cent of trade-union members.	Labor Gazette, Ottawa, March, 1925.	The corresponding per cent on Dec. 31, 1924, was 11.6, and on Jan. 31, 1924, 7.5.
Japan	Jan. —, 1925	30,000 unemployed in Tokyo.	Report from the American Consul at Tokyo, Feb. 10, 1925.	

Operations of Public Employment Offices in France ¹

THE departmental and municipal employment offices in France have been increasingly successful in the past eight years in placing workers in various classes of positions, the number of placements in 1924 amounting to 1,512,103. In addition to these positions filled by the regular public employment offices, 239,365 placements of immigrant workers were made by the frontier service.

The following statement shows the general results of the work of the departmental and municipal offices from 1917 to 1924:

	Number of placements
1917-----	159, 791
1918-----	326, 513
1919-----	882, 472
1920-----	1, 078, 294
1921-----	1, 073, 450
1922-----	1, 277, 946
1923-----	1, 446, 426
1924-----	1, 512, 103

The largest number of placements were of dockers and other port workers, 560,464; in food distribution, 212,394; loading and unloading, 156,394; agriculture, 127,847; and domestic service, 102,643.

Swiss Federal Law on Unemployment Insurance ²

ALTHOUGH Great Britain, Italy, and Austria have established compulsory unemployment insurance, which theorists have declared to be the only satisfactory solution of the problem, Switzerland recently has tried to solve the problem of unemployment insurance by enacting a law providing for voluntary insurance with Government subsidies. The principal provisions of the new law are as follows:

The "Federal law on contributions of the Federal Government to unemployment insurance" of October 17, 1924, provides that the Federal Government shall each fiscal year grant subsidies to public and private unemployment funds operated on insurance principles. Subsidies are not to be granted to funds operated for profit or for purposes not germane to unemployment insurance. In order to be entitled to Federal subsidies the funds must have a bookkeeping and accounting system of their own, must give guaranty for the proper administration of their resources, must have precise regulations as to contributions of members, benefits, and use of surplus funds, and must prohibit their members from holding membership in another fund.

Each fund shall pay its unemployed members daily benefits in accordance with its by-laws. Members who have dependents shall receive benefits at least 10 per cent greater than those of members without dependents. The maximum daily benefits of members with dependents may not exceed 60 per cent of their daily normal earnings and those of members without dependents may not exceed 50 per cent.

¹ France. Ministère du Travail, de l'Hygiène, de l'Assistance et de la Prévoyance Sociales. Bulletin du Marché du Travail, Feb. 20, 1925.

² Germany. Reichsarbeitsministerium. Reichsarbeitsblatt, Berlin, Feb. 8, 1925, pp. 55 and 105*.

In order to receive unemployment benefits the insured person must be out of work through no fault of his own, be registered at a public or trade employment exchange, and be unable to obtain suitable work. In addition he must have been a member of an unemployment fund and have paid contributions for a minimum of 180 days. If he fulfills all these conditions he becomes entitled to benefits three days after his registration at an employment exchange. Claim to benefits is limited to 90 days within 360, but in times of an economic crisis the Swiss Federal Council may extend this period beyond 90 days.

An insured person who becomes unemployed as a consequence of a labor dispute loses his claim to benefits for the period of the dispute and for 30 days afterwards. An unemployed person disabled for work loses his claim to benefits for the period of his disability. An insured person also forfeits the right to unemployment benefits if he refuses to accept suitable work or owing to his own fault does not find work, or if he does not comply with the provisions for his control, or if he makes incorrect or incomplete representations as to his unemployment or attempts to obtain benefits fraudulently.

Benefits may also be paid for partial unemployment. The benefits together with the earnings of the insured person may, however, in the case of persons with dependents not exceed 80 per cent of their normal earnings and in that of persons without dependents it may not exceed 70 per cent. Claim to benefits ceases if within 360 days the benefits received by an insured person for partial unemployment together with possible benefits for total unemployment exceed in amount full daily benefits for 90 days.

The Federal Government subsidy to unemployment insurance funds has been fixed by the law in the case of public funds and of private funds administered jointly by employers and workers at 40 per cent of the statutory benefits paid by these, and in the case of all other unemployment funds at 30 per cent. The Federal Assembly may temporarily increase the subsidy by 10 per cent. Benefits paid to members under 16 years of age or to those living abroad are to be deducted in computing the Government subsidies. An unemployment insurance fund which claims a Government subsidy must transmit to the Federal Labor Office two copies of its by-laws and regulations and all amendments to these and must also furnish to this office all statistics requested by it. The Federal subsidy becomes payable after the examination of the annual financial report of the unemployment funds by the Labor Office. This office is also authorized to investigate at any time the business administration of a subsidized unemployment fund. Subsidized funds may be granted advances of the Government subsidy.

A Federal subsidy may be granted subject to the condition that it shall be used to increase benefits or to grant benefits for a period in excess of 90 days, or for the opening of a reserve fund, or that the Cantons or communes also grant subsidies to the fund. It may also be conditioned on a minimum membership of the funds.

The Federal Council may refuse the payment of subsidies to unemployment benefits of aliens whose native country treats Swiss citizens less favorably in the matter of unemployment insurance than its own nationals.

INDUSTRIAL ACCIDENTS AND HYGIENE

Industrial Accidents in the United States in 1924¹

AN INCREASE of about 6 per cent in the number of industrial fatalities in the United States during 1924 is indicated by reports received from State labor departments and industrial accident commissions of 18 States. Such an estimate is open to question owing to the incomplete representation of States and the fact that several of the reports are for the fiscal year ending June 30. However, it is fairly safe to assume that there was a slight increase in the number of industrial fatalities for 1924 over 1923, although the increase was less marked than that of 1923 over 1922.

With regard to nonfatal injuries, the meager statistics available seem to indicate a slight reduction in the actual number of personal injuries though not in frequency rates based on the number of man hours worked. It is well known that fewer persons were employed in American industries in 1924 than in 1923, although no accurate estimate of the decrease has yet been made.

Reports from individual companies in many lines of industry showing improved frequency and severity rates aroused hopes that the decrease was general throughout American industry, a hope that has received little encouragement from the State reports. The companies reporting reductions had with scarcely an exception made earnest efforts in accident prevention. One definite conclusion may be drawn from the somewhat inconclusive statistics presented—that accidents grow like weeds when there is no systematic effort to check them.

Another conclusion, one which has long since been realized by all interested in accident prevention, is the need of more uniform methods of compiling accident statistics by State departments. Several States were unable to supply accident statistics more recent than those for the calendar year 1923 and still others had no means of determining even the number of fatalities occurring in the State, to say nothing of the nonfatal injuries. State officials have shown the utmost willingness to cooperate with the National Safety Council by furnishing all available information but in many cases departments have been handicapped by insufficient appropriations to compile the necessary statistics.

There is also a wide diversity in the comprehensiveness of the statistics furnished by different States. In a few, all industrial accidents are included, while in others railroad and mining casualties are omitted. In other States not all manufacturers are covered by the compensation laws. Some States report all injuries requiring medical attention while others list only compensation cases. This difference will be readily apparent in the accompanying table when the proportion of nonfatal injuries to fatalities is noted. Several States list all injuries according to severity—permanent total dis-

¹ Reprinted from National Safety News, Chicago, April, 1925, pp. 19, 20.

ability, permanent partial disability, and temporary disabilities according to time lost. The proportion of States keeping such detailed statistics, however, was not sufficient to include these subdivisions in the table. It must be remembered, of course, that the experience of one State is not exactly comparable with that of another but is of interest for comparison of the two periods.

INDUSTRIAL ACCIDENTS REPORTED BY STATE DEPARTMENTS, 1923 AND 1924

State	1923		1924	
	Fatal	Nonfatal	Fatal	Nonfatal
Colorado ¹	168	5,139	140	5,520
Idaho	57	6,310	83	6,401
Kentucky ²	108	24,000	97	28,133
Maine	61	16,305	30	14,083
Massachusetts ²	330	64,560	336	60,103
Minnesota	181	39,358	221	37,901
Montana ²	81	5,048	87	5,702
Nebraska	30	16,162	35	15,000
Nevada ²	31	1,074	30	1,305
New Jersey ²	290	49,002	283	47,958
New York ²	662	57,416	1,109	—
Ohio	888	183,983	999	174,454
Oregon	178	30,013	142	25,811
Pennsylvania	2,412	200,435	2,209	177,539
Rhode Island:				
Compensable cases	39	4,098	31	3,758
Noncompensable cases	—	26,987	—	23,878
Tennessee	90	25,008	142	21,223
Vermont	44	10,950	33	9,664
Virginia	145	9,188	163	10,088
Washington	401	35,523	407	39,095

¹ Year ending Nov. 30.² Year ending June 30.

Unlike the reports for 1923, the tendency is not universally upward. Several States showed reductions in the number of fatalities, the extent of the reduction perhaps indicating to some extent the curtailment of the number of man hours worked. Others showed fewer nonfatal injuries but an increase in fatalities.

In Maine, for example, where fatalities were reduced from 61 to 30, the decrease is largely attributed to curtailed operations in the textile, shoe, and pulp and paper industries.

Part of the increase, though probably only a small percentage for the United States as a whole, may be due to the increasing strictness of State departments in securing reports of personal injury accidents. Harry L. Nelson, superintendent of the division of workmen's compensation of the Tennessee Department of Labor, states that part of the increase in the number of fatal accidents in Tennessee is attributable to increased efforts along this line. A similar opinion is expressed by David R. Henderson, chief of the division of accident prevention, Industrial Commission of Minnesota, who says in part:

Accident data are misleading when trying to determine whether accidents are increasing or decreasing during a certain period of time, due to the fact that compensation laws are becoming more drastic and are better enforced, therefore making the reporting of accidents more accurate.

At present more accidents are being reported than ever before due to the fact that employers are more careful in reporting. In the past we have found that many employers did not report any accidents unless the man drew compensation. Also, many employees are drawing compensation for accidents where in the past, due to the lack of enforcement of the law, no damages were collected. I believe

that this condition has existed in all parts of the United States and that it is erroneous to assume that industrial accidents are increasing in the United States. Due to the intensive accident-prevention work undertaken everywhere, it is our firm belief that industrial accidents are decreasing, in spite of statistical data to the contrary. As the data secured becomes more accurate, we are sure that the decrease in accidents will be shown.

Others who are less optimistic than Commissioner Henderson regarding the accident situation, realize the justice of this argument. However, in the absence of more complete information, the present available statistics are of interest and value.

The increase in fatalities in Minnesota was due to the Crosby mine disaster in February, 1924, in which 42 miners lost their lives.

Among the most complete records received were those for Pennsylvania. These include mines and public service accidents as well as accidents occurring in manufacturing operations. All three groups showed reductions in both fatal and nonfatal accidents. Pennsylvania industries are widely diversified, including mining, and represent a fair cross section of American industry. In one respect, however, Pennsylvania differs from many States. A considerable proportion of the workers are employed by large concerns, particularly in the steel industry, which are active in accident prevention. Decreased industrial activities in these companies did not result in abandoning the safety program, and safety departments, freed from the problem of assimilating large numbers of new workers, were able to reduce accidents.

Fatalities in coal mining throughout the United States showed a reduction in the actual number of deaths, but an increase in the fatality rate per million tons mined. The number of fatalities was 2,381 for 1924 and 2,458 for 1923, a decrease of 77, but the rate per million tons was 4.27 against 3.74 for the previous year, according to reports of the U. S. Bureau of Mines.

Delaware reports an estimated decrease of approximately 10 per cent in the number of fatal and nonfatal accidents from the 1923 records.

Wisconsin reports an increase of 8.7 per cent in the number of compensable cases closed during the year, the figures for 1923 and 1924, respectively, being 20,941 and 22,766. Figures for 24 principal industrial cities of the State for the two years (in which industries are undoubtedly better organized for accident prevention) show 13,747 compensable cases for 1923 and 13,707 cases for 1924, a decrease of three-tenths of 1 per cent. The ratio of machine accidents to all cases was 16.2 per cent, the lowest percentage on record.

A reduction in the total number of railroad casualties of all kinds for the first 11 months of 1924 as compared with the same period of 1923 is shown by the statistics of the Interstate Commerce Commission. During this period of 1924 there were 6,087 persons killed and 131,416 injured compared with 6,779 fatalities and 159,534 injuries during the same period of 1923. Fewer locomotive miles and fewer man hours worked were reported by the railroads. Casualties per million locomotive miles for 1923 were 3.81 for fatalities and 31.02 for injuries; for 1924 the rates were 3.62 and 27.76. For nontrain accidents the rates per million man hours worked were 0.40 for fatalities and 31.56 for nonfatal injuries against the 1924 rates of 0.33 and 27.77.

Reports covering the accident experience of the industrial sections of the National Safety Council are now being prepared by the statistical committees of the sections and will be published in the National Safety News as soon as the tabulations are completed.

Quarry Accidents in the United States in 1923

THE report of the United States Bureau of Mines on quarry accidents in the United States during the calendar year 1923, issued as Bulletin 246, shows that more men were employed at stone quarries in 1923 than in any year since 1915, and the average number of workdays per man was the highest ever reported. The fatality rate from accidents at quarries was the lowest on record, while there was a slight increase in the nonfatal injury rate over that in recent years.

The number of men employed in 1923 was 92,455 and the average number of workdays per man was 276. There were 143 men killed and 14,990 injured, the fatality rate being 1.68 and the injury rate 176 per 1,000 300-day workers in 1923 as compared with 1.92 killed and 172 injured in 1922. Corresponding rates for the five-year period 1916 to 1920 were 2.10 and 160, respectively. The number of men employed within the quarry pits was 57,188 and accidents to these men resulted in 99 deaths and 8,946 injuries, while there were 35,267 employed at crushers and other plants outside the quarries, with 44 deaths and 6,044 injuries. Among the men working inside the quarries there were 1.97 fatalities and 178 injuries per thousand full-time workers and among men working outside at crushers, cement mills, etc., the rates were 1.26 and 173, respectively.

The following table shows the number of persons killed and injured during 1922 and 1923, by kinds of quarries:

NUMBER OF EMPLOYEES AND NUMBER KILLED AND INJURED, DURING THE YEARS ENDING DECEMBER 31, 1922 AND 1923, BY KIND OF QUARRY

Kind of quarry	Active operators	Men employed		Killed		Injured	
		Actual number	Equivalent number of 300-day workers	Number	Per 1,000 300-day workers	Number	Per 1,000 300-day workers
1922							
Cement rock.....	78	12,260	12,759	29	2.27	2,438	191.08
Granite.....	250	8,956	7,038	10	1.42	1,036	147.20
Limestone.....	802	39,961	33,728	63	1.87	5,994	177.72
Marble.....	44	4,803	4,626	2	.43	591	127.76
Sandstone and bluestone.....	154	4,305	3,349	4	1.19	337	100.63
Slate.....	74	3,941	3,493	11	3.15	445	127.40
Trap rock.....	147	4,855	3,868	13	3.36	998	258.01
Total.....	1,549	79,081	68,861	132	1.92	11,839	171.93
1923							
Cement rock.....	72	13,378	14,969	25	1.67	3,199	213.71
Granite.....	289	11,658	9,950	9	.90	1,771	177.99
Limestone.....	865	46,325	41,818	78	1.87	7,080	169.30
Marble.....	51	5,351	5,122	3	.59	655	127.88
Sandstone and bluestone.....	164	4,972	4,170	2	.48	498	119.42
Slate.....	75	4,329	3,749	8	2.13	559	149.11
Trap rock.....	166	6,442	5,375	18	3.35	1,228	228.47
Total.....	1,682	92,455	85,153	143	1.68	14,990	176.04

The report also gives tables showing the number of accidents from each specified cause in the different kinds of quarries and by States. The principal causes of accidents within the quarries in the order of their importance were handling rock at the face, flying objects, haulage, falls or slides of rock, machinery, falling objects, falls of persons, and drilling and channeling, and outside the quarries were flying objects, machinery, falling objects, haulage, falls of persons, and hand tools. The principal causes of fatal accidents inside the quarries were falls or slides of rock or overburden, haulage, explosives, and falls of persons, and in outside plants were machinery, haulage, falling objects, falls of persons, and burns.

Accidents and Deaths From Occupational Disease Among Electrical Workers

THE following statistics of fatal accidents and deaths from occupational disease among the members of the International Brotherhood of Electrical Workers for the years 1922 to 1924 are given in the *Journal of Electrical Workers and Operators*, March, 1925 (pp. 213, 214). Tuberculosis and pneumonia, which are considered by Louis I. Dublin to be among the most important occupational diseases, are included in this table.

FATAL ACCIDENTS AND DEATHS FROM OCCUPATIONAL DISEASE AMONG MEMBERS OF INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS, 1922-1924

Cause of death	1922				1923				1924			
	Line-men	Inside-men	Other occupations	Total	Line-men	Inside-men	Other occupations	Total	Line-men	Inside-men	Other occupations	Total
Electrocution.....	23	7	1	31	12	10	7	29	29	11	5	45
Falls.....	9	4		13	5	7		12	13	11	4	28
Burns.....	4			4	3	3		6	4	1	1	6
Miscellaneous accidents.....	3	5	3	11	6	11		17	2	7	2	11
Tuberculosis.....	9	18	6	33	7	19	5	31	5	22	1	28
Pneumonia.....	3	11	3	17	5	14	1	20	7	23		30
Total.....	51	45	13	109	38	64	13	115	60	75	13	148

Lime Dermatitis

AN ARTICLE by Dr. W. J. O'Donovan in the *Lancet* (London) of March 21, 1925 (pp. 599-602), gives clinical reports of several cases of lime dermatitis (inflammation of the skin), four of which occurred among "tunnel miners." These cases are cited as showing the influence of lime in causing serious dermatitis in various occupations in which the cause of the trouble might not be suspected.

The men working as tunnel miners are employed in digging tunnels with or without the aid of compressed-air shields. In one case in which the worker had had recurrent attacks of lime dermatitis over

a period of 15 years, during which time he had been in a hospital with it three times, the dermatitis had been diagnosed as seborrhea (functional disease of the sebaceous glands) and the occupational cause of the dermatitis had not been suspected. It was discovered that in each case he had been employed at sealing the space between the iron shields and the brickwork of the tunnels with slaked "blue lias" lime—a lime containing so much silica that it would be regarded as a hydraulic cement. This lime, which was emptied from the sacks into receptacles by the worker and carried by him with a hand scoop to a tank of water, was forced into the place to be cemented under air pressure of from 12 to 27 pounds per square inch, the high pressure increasing the amount of dust. The three other tunnel workers, all of whom were suffering from lime dermatitis, had had severe disabling attacks of it, all but one case, however, having cleared up under treatment without the general health being affected. Several cases of dermatitis among building workers working in cement were also reported and one case of housewife's lime dermatitis caused by using chloride of lime in washing clothes.

In the editorial notes in the same issue of *The Lancet* the fact that new causes of dermatitis are constantly arising owing to the invention of new chemical processes is pointed out and the following comments on the difficulty of diagnosis are made:

That a dermatitis is one of occupation may be easily missed in diagnosis, because many different agents produce a dermatitis superficially similar, or one resembling some common skin condition not regarded as due to an external irritant—witness the first case of lime dermatitis quoted in Doctor O'Donovan's article, where, in the original attack, the patient's trouble was diagnosed as seborrheic. Secondary infections with staphylococci or streptococci are frequently superimposed on a dermatitis originally due to occupation and still further confuse the issue. Some types of trade dermatitis are, however, well marked and easily recognizable when once known to the observer; such are "chrome sores," "lime holes," "pitch skin," "tar acne," and "mule-spinners' cancer," whose names suggest their origin. The agents causing trade or occupation dermatitis are numerous, and many attempts to classify them satisfactorily have been made by different authors. They may, for instance, be divided into physical, chemical, and parasitic groups. The physical would include such causes as mechanical injury, wind, light, X rays, extremes of heat and cold, of dryness and moisture. The chemical group is by far the largest and requires much subdivision; it includes both organic and inorganic chemicals and the toxins of certain plants and trees. The parasitic group includes infections due to bacteria and fungi, and the attacks of animal parasites, such as mites. Causes coming under two or more of these headings may act together. The points of attack of the chemical irritants are almost invariably, in the first instance, the mouths of the hair follicles, the sebaceous glands, and the sweat pores, with, in addition, the natural furrows on the skin and any accidental abrasions. The maceration of the epidermis by the action of alkali materially increases the danger of attack by chemicals.

Attention is also directed to the fact that certain workers seem to be naturally immune to such risks while others acquire immunity, although this immunity may break down under temporary ill-health or excessive exposure to the irritant. Treatment consists essentially of removal of patients from exposure to the irritant and protective and antiseptic treatment of the lesions, the possibility of the development of malignant disease being always kept in mind.

Menace of Tetraethyl Lead to Garage Workers¹

AN ARTICLE in the *Nation's Health*, March, 1925 (pp. 169-171), on tetraethyl lead, the composition added to ordinary gasoline to make "ethyl gas," points out the possible danger to garage workers from its use and the measures to be taken for the prevention of poisoning.

Tetraethyl lead was developed after seven years of research and its discovery was recognized as one of the greatest accomplishments of the year in chemical engineering. The use of this "anti-knock" compound has made it possible to build and operate a high-compression motor that will double the utilization of the latent power in gasoline, so that it is possible to get twice the mileage from a gallon of gasoline. "Standard automobiles in which the compression had been raised from 80 pounds to 160 pounds per square inch, when run on ethyl gas, climbed steep grades in high speed at less than 10 miles an hour without even a trace of a knock and without the slightest injury to the engine." From the efforts spent in developing this compound and its success, it is evident that the use of tetraethyl lead in motor gasoline has come to stay and therefore it is only a question of furnishing adequate protection to workers coming in contact with it.

During 1924 ethyl fluid was distributed at filling stations from one-quart steel bottles, but it is expected that eventually it will be added to the gasoline at the refinery. Although during 1924 hundreds of thousands of gallons of ethyl gas had been dispensed at filling stations not a single case of poisoning from it was reported.

The growing use of the gas, however, and the consequent increasing number of garage workers who will be exposed to any hazards involved in its use makes it important to determine whether or not such hazards exist. There are three possible sources of danger to garage workers from ethyl gas: First, inhaling the motor exhaust; second, handling engine parts covered with lead; third, spilling the gasoline on the hands or clothing. Experts in the United States Bureau of Mines have studied the possibility of contracting lead poisoning from inhaling the exhaust from motors using ethyl gas. It has been shown that a large percentage of the lead remains in the engine and exhaust pipes, tests of the gasoline used during one month showing that 80 per cent could be recovered from deposits in the engines and pipes. The largest quantity of lead dust found was 0.216 mg. per cubic meter of inhaled air and tests on the men showed that most of the inhaled lead, being very finely divided, was again exhaled. The maximum amount of lead retained in the system was 27 per cent and the average 15 per cent, and it was considered that a good deal of this might be retained in the nasal passages and throat, from which it would be swallowed or expectorated.

In the course of these tests various animals were exposed for six months to exhaust gases containing 0.2 mg. of lead or less, but none of them showed any evidence of lead poisoning. These animals did, however, show definite evidence of carbon monoxide poisoning, as there was an average blood saturation with carbon monoxide of 10

¹ See MONTHLY LABOR REVIEW, February, 1925, pp. 173, 174.

per cent, indicating that the carbon monoxide hazard in garages is much more important than a possible lead hazard from ethyl gasoline.

There is said to be little danger to the general public from the use of the lead, as the quantity deposited on the streets from the exhaust gases is so small as to be negligible. The danger to repair men from handling engine parts is, however, very real, as an average car would use during a season about 500 gallons of ethyl gas containing 3.3 pounds of lead, so that it is possible that nearly 2 pounds of very finely divided and poisonous lead would be deposited on the cylinder and the exhaust pipes. It is important that separate work benches should be provided for repair of these parts and that care should be exercised to remove the poisonous lead products from shop apparatus and from clothing and hands. To this end every repair shop should be provided with hot running water.

The third possible hazard is the danger of absorption of the tetraethyl lead through the skin, since spilling of gasoline at filling stations can never be entirely prevented. It has not been definitely proved that there is enough tetraethyl lead in ethyl gas or in the vapors rising from ethyl gas to cause poisoning during distribution of the product to consumers, but the question is now being studied. The lead is an oily compound which is readily absorbed by the skin, and as it is less volatile than gasoline it remains on the hands longer. It is a cumulative poison, causing first insanity and then death, but whether the amount in the gasoline is great enough to produce this effect is not known, although it is considered advisable if a filling station attendant or consumer spills ethyl gasoline on his hands to wash them immediately, or if it is spilled on the clothes to change them at once.

Warning is given by the writer also against the practice which has obtained in recent years of using motor gas to clean clothing. There is a possibility that absorption of lead remaining on the garments after cleaning might take place and also inhalation of the poisonous gasoline fumes might be dangerous.

The writer points out that the casualties reported in the press in connection with the use of tetraethyl lead were all in chemical factories where the product was being manufactured and that in Bayway, N. J., where five deaths occurred, the work was being done in an experimental plant in which the specific provisions of the labor law that efficient exhaust devices for removing the fumes at the point of origin had been complied with, although the larger plant which was to have been built would have incorporated improvements in design affording better protection to the life and health of the workmen. It is suggested that makers of tetraethyl lead make an effort to find a chemical that will react readily with it to form a less poisonous lead compound. Such a chemical could be used in washing tetraethyl lead from the hands of the workers, and in removing it from floors and apparatus. The air of the workroom might also be purified by adding hydrogen sulphide or chlorine, provided toxic concentrations are not exceeded, or by the use of apparatus for adding ozone to the air.

Effects of Brass Dust on Industrial Workers

AN INQUIRY relative to the harmful effects of brass dust on membranes of the body and particularly its effect upon the eyes having been received by the Bureau of Labor Statistics, the following summary of the information compiled in reply is published for the benefit of the readers of the MONTHLY LABOR REVIEW.

Consultation of the various works on industrial diseases fails to show that the work of brass workers has been generally associated with disease of the eyes. Kober and Hayhurst, mention catarrhal affections of the eyes and respiratory passages, headache, and gastric derangements as being found among workers using ordinary gold bronze powder, which is composed of copper and zinc with traces of lead, tin, arsenic, and iron and Thompson states that double vision is commonly associated with "brass chills" among those working in brass and brass polishing.

The following statement in regard to the harmful effects of brass is taken from Industrial Health, by Kober and Hayhurst (pp. 341, 342):

Brass dust (grinders, polishers and buffers) does not produce "brass founders' ague," and has only the harmful effects of metallic dusts in general. The lead in the alloy dust may produce its symptoms in very susceptible persons (?). Brass in any condition short of the recent vaporous state of its components produces no intoxication peculiar to itself.

The essential health hazard from brass is the inhalation of the metallic fumes. Analyses of brass fumes show:

Substance	Deposits from flues		Analysis of fumes	Bench settling	
	A	B	C	D	
Zinc oxide.....	32.13	24.74	28.82	(zinc)	44.9
Lead oxide.....	.31	1.92	.00	(lead)	.8
Iron oxide.....	2.43		2.78		
Copper oxide.....	2.85	2.50	(copper) 1.71		
Cadmium oxide.....	1.56	.89	(moisture) 9.64		

Insignificant traces of arsenic, nickel, and manganese may be present, and Sigel found the chills where copper was absent in the fumes. Symptoms traceable to phosphorus in phosphor-bronze and manganese in manganese-bronze have never been reported. Antimony poisoning occurs, however, among type-metal refiners and melters, and dermatitis and "biting" nasotracheitis from this should be distinguished from "brass itch" and "zinc asthma," respectively. Braziers and hard-solder workers, especially where electric welding or the modern blowpipes (oxy-acetylene, oxy-hydrogen) are used,¹ may suffer greatly from metal chills due to volatilization of the alloys worked upon.

Chronic effects of brass poisoning.—In Chicago the fact that 85 per cent of 1,761 foundry workers were under 40 years of age, and only 1 per cent over 50 years, was explained by employers as due to "slowing up," or beginning in-crepitude, and by workmen, as gradual incapacitation from the inhalation of brass fumes and the strain of the work. The constant intake and elimination of unusual amounts of zinc and copper from the system along with the repetition of brass chills or the constantly forced immunity to the same are enough to

¹ *Autogenous welding.*—Jennie Adler-Herzmark (Zentralbt. f. Gewerbehy., May, 1921), investigated a number of small industries in which autogenous welding is done and found that acute attacks resembling brass founders' ague, and probably identical with it, are always associated with the use of hot brass or zinc. Zinc vapors were often visible.

cause degenerative diseases in themselves even though the immediate afflictions above mentioned are overlooked. Chronic bronchitis or "asthma," emphysema, and pulmonary tuberculosis are very common. Older workers invariably complain of dyspepsia, "biliousness," occasionally of gallstones and they are often icteroid [jaundiced]. Constipation is the rule among them and hemorrhoids are frequent complaints. Pyorrhea alveolaris, carious teeth, gastroenteritis, sallow complexion and anemia, ill-nourishment and emaciation, chronic alcoholism, Bright's disease, nervous and heart diseases are all above the average.

Effect of Noises on the Hearing of Workmen

MANY letters are received by the Bureau of Labor Statistics asking for information relative to different industrial hazards and occupational diseases. The answering of these letters often involves considerable research and frequently the subject appears to be of sufficient interest at the time to justify publishing the results of these researches in the MONTHLY LABOR REVIEW. Several inquiries having been received recently in regard to the effect of noises on the hearing of workmen, the following summary of the effects of loud or long-continued noises in producing injuries to the ear has been made from standard works on occupational diseases.¹

The special causes of an occupational origin which injuriously affect the hearing are produced by trauma or are the result of irritation in the mucous membrane of the nose and nasopharynx. Any inflammation in these parts has a tendency to involve sooner or later the organs of hearing, and among the trades which must be included among the industrial causes of ear diseases are those in which there is exposure to irritating dusts and fumes, to extremes or sudden changes of temperature, and to excessive humidity in the atmosphere.

In addition to these causes of impaired hearing, the sound-transmitting apparatus of the middle ear may be injuriously affected by certain special conditions incidental to the trades, such as the use of chemical poisons which show predilection for the auditory end organ and nerve; sudden excessive change in atmospheric pressure, as in the concussion from explosion; and exposure to noises which overstrain the delicate filaments of the auditory sense organ. There are trades in which more than one of these conditions are present, as in the case of machinists, who are exposed to irritating dusts in addition to continuous disagreeable noises; aviators, who in addition to the continuous noise of the motor are subjected to sudden changes of temperature and barometric pressure; and railway employees, who are exposed to much soot, dust, and bad weather and to the noise of the shrill whistle and the moving train.

Sudden variations in air pressure such as unexpected explosions in mining, blasting, and tunneling, or the near-by discharge of artillery, especially in inclosed spaces, may result in rupture of the eardrum. Ruptures of this kind are usually irregular in outline. The torn edges bleed freely and the coagulation of the blood assists in joining together the edges with resultant speedy healing, which is less likely to be the case when the wound is produced by direct contact and possible infection. Such ruptures are of more frequent occurrence

¹ Thompson, W. Gilman: *The Occupational Diseases*. New York, D. Appleton & Co., 1914. pp. 571-574. Kober and Hayhurst: *Industrial Health*. Philadelphia, P. Blakiston's Son & Co., 1924. pp. 890-904.

in the Navy than in the land artillery service owing to the condensation of the concussive effect in the circumscribed spaces on shipboard, and for the same reason are more frequent in mining operations than from explosions in open trenches or on the level in the open air. The effect of such explosions on the external ear has been shown by different observers to be less severe and more rapidly recovered from if the explosion produces rupture of the drum membrane.

Caisson workers are liable to impaired hearing resulting from too sudden return from continued exposure to increased atmospheric pressure to normal pressure, and divers and submarine workers are subject to congestion of the mucous layer of the tympanum.

The following statement by Thompson shows the effect of intense sounds, particularly those of high pitch and replete with metallic overtones, on the hearing of workers in various occupations:

Labyrinthine ² disease, in so far as it is occupational, is mainly due to excessive noise. It may be temporary or chronic and may result in permanent deafness. Vertigo is a common symptom of it, with sometimes nausea and vomiting, with faintness.

The effect of noise upon the delicate internal ear presents an interesting study. It has been found that the volume of sound, i. e., the loudness of the noise, has less influence than the quality in causing deafness. A reverberating noise, long continued in a confined space like the inside of a boiler which is being riveted, is particularly harmful, but damage also occurs to the labyrinth from explosions, as when firing big guns, especially in the turrets of warships, testing high-grade explosives, mine explosions, etc. The deafness produced by constant noise of high pitch, but not necessarily extremely loud type, is common among loom tenders, spinners, and railway engineers, and may occur in telegraphers. A large proportion of railway engineers, fully 45 per cent, if they have been employed on engines for a number of years, have more or less labyrinthine deafness. This is especially true of those employed on oil-fed locomotives, which are more noisy than those which burn coal, on account of the roar of the boiler fires. To this must be added the noise of whistles, air brakes, and the general pounding of the train on the rails. Frequently, immediately after leaving the engine after a long run, the hearing is more defective than after rest.

In many cases of occupational deafness the patient is annoyed, even when at rest, by buzzing or ringing auditory sensations. Occupational labyrinthine deafness is more pronounced for high than low notes, so that the patient may be able to hear low-pitched voice sounds while he is, perhaps, completely deaf to the high pitch of a shrill whistle.

The men who use automatic rivet hammers in the fastening of iron girders on bridges and buildings are subjected to as much noise as boiler makers, except that, not working in a confined space, there is less reverberation. "Boilermaker's deafness," as it is technically called, is usually of labyrinthine type, and in time the high-pitched notes damage the labyrinthine structures permanently. Experiments with animals have confirmed such changes as resulting from high rather than low pitched noises. Unfortunately, there seems to be no remedy for this hazard, for not alone the ears, but the temporal and other cranial bones are set in acute vibration, and, if a man must work inside a boiler or gun turret, he has to accept the consequences.

In iron and steel foundries noise of trip hammers induces both acute and chronic deafness from the excessive vibrations which affect the internal ear. Gas explosions in the foundries may give rise to rupture of the tympanum.

Among 75 smiths employed in manufacturing railroad equipment, Gottstein and Kayser found 30 with serious impairment of hearing. Barr found among 100 kettlesmiths that only about 9 per cent had normal hearing, and, among 31 more, Habermann could discover none whose hearing was not impaired. Among 40 coppersmiths Holt found 36 with abnormalities of hearing. The deafness is bilateral, but the ear usually nearest the loud noises is found chiefly affected. Subjective noises are heard in about half the cases and vertigo is common.

Most of the authors referred to locate the difficulty in the internal ear. In an autopsy upon one of his patients Habermann found atrophy of the filaments of the auditory nerve.

² The labyrinth is the series of cavities of the internal ear.

It has been proved by clinical observation and experiments upon animals that it is not tones of medium low pitch, those most readily transmitted by bone conduction, that cause the progressive impairment of hearing in most of the cases having an occupational origin, but those of comparatively high pitch which are conveyed to the internal ear more directly by the sound-transmitting apparatus of the middle ear. The majority of the experiments upon animals included the use of very high-pitched tones produced by whistles, organ pipes, high-pitched metallic bodies of various kinds, and metallic sounds of lower pitch which were similar to the sounds to which factory operatives, machinists, and boiler makers are exposed. The results of these observations showed that exposure of one or both ears continuously for a period of several days or weeks was followed by progressive degenerative changes in the internal ear corresponding to the intensity and duration of application of the sound. It was also found, under conditions approximating those to which boiler makers are subjected, that where one ear was closed the degenerative process was present in the ear remaining open and where both ears were closed the degenerative process was not exhibited in either ear. Subjective noises almost invariably accompanied impairment of hearing, but dizziness or vertigo was present only in the more advanced cases in which there was a marked decrease in the upper tone limit in hearing. Dizziness as an accompanying symptom is found more frequently among mill and factory operatives whose work subjects them to vibration from the machinery in addition to the noise.

The preventive measures advocated by Kober and Hayhurst are as follows:

Experience in the Army proved conclusively the value of protective devices in lessening casualties due to concussion. Here the main problem is to get an ear protector that allows enough hearing to hear orders and at the same time save the labyrinth.

In the trades the problem is to get a simple convenient protector that the workman will use. Hard metallic devices, which in case of accident might be driven inward, are generally to be avoided. Cotton wool is a very satisfactory protector when moistened with glycerine or vaseline, or worked up with some material like plasticene. When any protector which completely fills the canals has remained in place a long time the warm air confined within expands and produces an unpleasant sensation. Removal at intervals for ventilation is therefore advisable.

The sound-transmitting apparatus of the middle ear serves the double purpose of sound transmission and of protection to the transmitting and perceptive mechanism beyond it; but is capable of exerting this office only for periods of limited duration and, under conditions of continuous subjection to loud sounds, covering a limited portion of the audible scale, in itself becomes fatigued and incapable of exercising its protective office. The obstacle presented to the passage of sounds of short wave lengths through the soft tissues of the body affords a certain measure of protection in one direction, and the obtunding of the external auditory canal prevents the influx of the objectionable sound through that natural passage; but this serves as only a partial protection and an important step in the welfare work of the trades will be in the elimination of that offensive and injurious by-product of mechanical action—sustained and unnecessary noise.

Sanitation in the Modern Bakery¹

THE changed methods in the manufacture of bread which have developed in the past decade are the result primarily of the enactment of legislation covering the sanitary production of food by all the progressive States. Much of the progress, however, has come from within the industry itself, as progressive bakers, realizing that the confidence of the consumer is necessary to the growth of their business, have been active in securing legislation and regulation of the industry by health officials.

While the baking industry was one which for centuries had been carried on under most insanitary conditions and in which the workers as a class were short lived, the modern bakery presents no resemblance to the shops of even a few years ago. A law passed in Indiana in 1919 and one passed later in Massachusetts are practically identical. They provide that rooms used for the production or sale of bakery products shall be clean and well lighted and ventilated; that there shall be adequate plumbing and drainage facilities, including wash sinks and toilets in rooms having no direct connection with the factory and salesrooms; and that the floors, walls, and ceilings shall be kept clean and sanitary and all doors and windows screened. These laws also provide that the workrooms can not be used for any other purpose, so that the bakery is no longer used as a sleeping and living room. Special rooms must also be provided for changing and hanging wearing apparel and these rooms must be kept clean and well ventilated. One of the most important features of these laws is the provision that all persons intending to work in a bakery must have a thorough physical examination so as to eliminate those with contagious or infectious diseases, and that they must submit a certificate of health before going to work. A further provision of the Massachusetts law is that no new bakery can be opened until the building plans and the equipment have been approved by the local board of health, and if after being opened a bakery is not properly operated it may be closed by the health authorities.

While these laws relate to but two States, general conditions are said to be satisfactory, the writer stating that "no industry has made greater progress toward cleanliness and quality than that of the bread baker."

Industrial Health Promotion in Small Plants

AN ARTICLE by Dr. Carey P. McCord in the *American Journal of Public Health*, April, 1925 (pp. 299-302), summarizes a report on the health work carried on in small-scale industries which was read before the industrial hygiene section of the American Public Health Association at its fifty-third annual meeting held in Detroit, Mich., in October, 1924. The report covered plants employing less than 500 workers in manufacturing, mercantile, mining, and transportation industries. The majority of the 41,000,000 gainfully employed persons in the country are employed in these small

¹ *The Nation's Health*, March, 1925, pp. 183-185: "The sanitary bakery safeguards the common health," by H. E. Barnard.

plants. Ninety-nine per cent of the factories employ 500 persons or less and 60 per cent of the factory workers are in these establishments—a condition which is reflected in the other industries.

The medical department has become a definite part of the organization of large industrial plants, and its value to the manufacturer, the wage earner, and the community is well recognized. The factory medical departments insure for the employees care in sickness or injury, sanitary working conditions, education in safety measures, and placement according to the physical and mental capabilities of the individual worker. Because of these immediate returns the medical work justifies and pays for itself year by year. The experience of large industrial enterprises has been such that it seems that the daily assembling of large numbers of persons for the purpose of work offers the best opportunity for the promotion of measures to conserve the health of adults. It is important, therefore, to devise means by which this constructive health work may be carried into the small plants which, as has been shown, employ such a large proportion of the wage earners of the country.

At the present time the medical work in small plants is in general confined to the care of emergency cases, usually by sending the sick or injured person to some neighborhood physician or calling such a physician into the plant. It is obvious that although such physicians may be well qualified to take care of medical or surgical conditions they are not acquainted with trade processes and industrial health hazards and their work ends with the particular case for which they are called.

The minimum essentials of industrial health service include carrying out some or all of the medical activities on the factory premises, and, in addition to the emergency relief measures, at least part of such related measures as periodic physical examinations, accident prevention, health education, dental care, etc. Attention should also be paid to the physical conditions of the plant, such as lighting, air conditions, drinking water, etc., and the personnel in charge of the medical work should be familiar with the diseases and injury hazards peculiar to the particular industry and with the means for their control. Daily dispensary service of at least one hour should be provided in plants in which there are 100 workers or over, and detailed medical records which may prove of value to the employer or employed in the settlement of claims or that may prove of value in the subsequent medical experience of the worker should be kept. All medical work carried out in the plant dispensary should be without cost to the employees.

About 350 personal and circular letters were sent to industrial physicians, Government departments, universities, etc., for the purpose of determining the present practice in regard to the provision of medical service in small plants. Answers were received to about 16 per cent of the letters sent, and from these replies, together with the information obtained from other sources, the following general conclusions were drawn which are believed to represent the situation at the present time:

1. Less than 1 per cent of the sizable small plants maintain adequate medical departments.
2. Physical conditions and general health conditions of workers are in a lower state in small plants than in large ones.

3. Physical conditions and general health conditions of workers are better today than ten years ago.

4. Industrial commissions, factory codes, factory inspection, group insurance, national safety organizations, etc., have been of benefit in the health conservation in small factories.

5. Industrial injuries are generally well cared for at the present time.

6. The personality, the integrity, and ability of the physician in charge is the largest single factor in the promotion of industrial medicine.

7. No exact data on small plant medical departments are available from such organizations as the United States Public Health Service, Department of Labor, The National Safety Council, Conference Board of Physicians in Industry.

The plans in force in different places for providing the needed medical service in small plants include—

1. Employment of a physician on a full-time basis, his surplus time to be used in such other activities as employment management, safety supervision, and personnel work. This plan has been most successfully employed in isolated communities, such as mining towns, where the families of the workers also need medical service. Ordinarily, the services of a full-time physician when limited to the plant are necessary when the number of employees is less than 300.

2. Association of several plants in providing medical service and dispensaries. This plan has been successful in a few cases, but in others has failed as the result of unequal amount of cooperation. The Harvard Mercantile Health Work in Boston is an example of this type of service.

3. Association of a group of industrial physicians, hygienists, safety engineers, statisticians, etc., who furnish medical supervision suited to the needs of a number of small plants. Under this plan a fixed time is spent daily in each plant, provision being made for caring for emergency cases, and sanitary and safety investigations are made. This system supplies, at a low cost to the manufacturer, the services of persons qualified in a variety of industrial health and personnel problems. Examples are the New York Industrial Health Bureau and the Industrial Health Conservancy Laboratories of Cincinnati.

Other health activities, which while not primarily concerned with small plants nevertheless contribute to a solution of the problem, are the Workers' Health Bureau for trade-unions which is now in operation, and the services developed in nearly every industrial community which are limited to the care of such emergencies as are covered by the State compensation acts. The Mutual Liability Co. of Detroit and the Industrial Medical Service of California are examples of such enterprises, which, even though effective in carrying out surgical relief for injured workmen, do not, however, reach the fundamentals of health conservation.

Industrial Accidents in Illinois Coal Mines, 1924

ACCORDING to the Illinois coal report for 1924,¹ 184 coal miners were killed and 3,895 injured during the year, as compared with 161 killed and 3,615 injured during the previous year.

¹ Illinois. Department of Mines and Minerals. Forty-third annual coal report of Illinois, 1924. [Springfield], 1924, pp. 90-311.

Of the fatal accidents, 176 took place underground, 4 in the shaft, and 4 on the surface. The largest number of underground accidents (76) was caused by falls of coal, rock, etc.; 40 were due to gas explosions, 37 to mine cars and locomotives, 10 to explosives, 5 to electricity, and the remaining 8 to mining machines and various other causes. Of the 184 miners killed, 115 were married and left 268 dependents.

Of the 3,895 men who sustained injuries causing a time loss of 30 days or more, 471 did not return to work. The others had a combined time loss of 190,582 working-days, or an average of 55.66 days per man.

By far the most important cause of the nonfatal injuries was falls of roof and sides (1,069); the next most important cause was pit cars, which caused injuries to 777 men.

The following table, taken from the report, shows for specified periods the number of deaths and injuries per million tons mined and the ratio per thousand men employed:

NUMBER OF DEATHS AND INJURIES PER 1,000 MEN EMPLOYED AND PER MILLION TONS MINED, IN SPECIFIED PERIODS, IN COAL MINES OF ILLINOIS

Period	Number of tons mined	Number of employees	Deaths			Injuries		
			Number	Per 1,000 employed	Per million tons mined	Number	Per 1,000 employed	Per million tons mined
1883-1893	156,857,041	213,143	648	3.0	4.1	2,769	13.0	17.7
1894-1903	233,508,512	399,290	900	2.3	3.9	5,200	13.0	22.3
1904-1913	477,057,031	697,527	1,990	2.9	4.2	7,147	10.2	15.0
1914-1923	718,887,322	880,344	1,901	2.2	2.6	25,196	28.6	35.0
1924	72,308,665	99,765	184	1.8	2.5	3,895	39.0	53.9

Industrial Accidents and Diseases in New Jersey, 1923-24

THE report of the New Jersey Department of Labor and its several bureaus for the fiscal year 1923-24 contains accounts of the work done along the lines of industrial accidents, hygiene, etc., in the State.

During the year in question a special effort was made to enforce the 1912 law authorizing the department to order the installation of ventilation apparatus and dust-removal devices in workrooms where industrial dusts, noxious fumes, and excessive heat are present to a degree jeopardizing the health of the workers. The department "has proceeded on the theory that the proper place to control poisonous gases or dust is at the point of origin, and if this can not be done, then mechanical devices must be installed that will provide adequate protection for the workers."

In many cases it has been necessary to rearrange completely the plant processing and to depart radically from traditional plant structural designs. The workshops of New Jersey are now being constructed in conformity with architectural principles that take into consideration the question of proper lighting and ventilation. The dark, gloomy workshops that formerly prevailed are being rapidly replaced by buildings of more modern design.

Occupational diseases, to the number of 48 cases, were reported during the year. These included 3 cases of anthrax, 38 cases of lead poisoning, 3 cases of benzene poisoning (from paranitranilin, mononitrochlorbenzol, and anilin), and 4 cases of mercury poisoning. Also, several cases of necrosis (gangrene) of the jawbone were reported as having occurred among workers employed in a plant manufacturing a radio-active luminous paint compound. These workers were employed in painting dials for clocks with a luminous paint. As the symptoms in all the cases seemed to be the same—necrosis, extreme pallor and anemia, and in some cases dyspepsia—"a strong suspicion" was aroused that the necrosis was caused by the materials handled, the whole matter is now under investigation.

During the year 48,241 industrial accidents involving a time loss greater than the remainder of the day on which the accident occurred were reported, a decrease of 1,051 as compared with the previous year. The statement below shows the number of accidents, by industrial groups:

	Fatal	Nonfatal
Factories and workshops.....	111	22, 055
Building and construction.....	67	11, 492
Mines and quarries.....	12	434
Miscellaneous.....	93	13, 977
Total.....	283	47, 958

In factories and workshops the greatest number of deaths (14) was caused by explosions of powder, dynamite, etc.; followed by falls of persons, which caused 10 deaths. Power-working machinery caused the greatest number of nonfatal injuries (7,846). Other important causes were handling of objects (4,897), falling objects not being handled (2,577), and stepping upon or striking against objects (1,709). The chemicals and chemical products industry was chargeable with the greatest number of deaths (39) in the factories and workshops group. The next largest number of deaths (11) and also the greatest number of nonfatal accidents (3,893) occurred in the metal-goods industry; this latter number was very nearly approximated in the machinery and instruments industry which was responsible for 3,587 nonfatal accidents.

The largest number of fatalities (12) in building and construction was caused by falls from scaffolds, ladders, etc. No other cause was responsible for as many as 10 deaths, although 8 deaths occurred in railway operations, and 7 were due to the collapse and fall of material. This last cause—collapse and fall of material—was responsible for 4,903 nonfatal accidents, and handling of sharp objects for 1,674.

The chief cause of both fatal and nonfatal accidents in mining and quarrying was falls of ore, rock, etc., causing 7 deaths and 95 non-fatal injuries.

In an endeavor to reduce the accident rate, safety meetings "of an industrial educational character" were held in nearly all of the industrial centers of the State, at which lectures were given and motion pictures shown "depicting dramatic phases of general accident-prevention work," a special effort being made to show pictures with specific bearing on the industries under discussion at the particular meeting.

The report of the New Jersey State Rehabilitation Commission, which is incorporated with that of the department of labor, shows that during the year 2,862 persons were given medical and physical treatment, of whom 75 per cent were workers injured in industry. "As a result of improvement by physical rehabilitation, most of the injured were enabled to resume their former occupation."

Fatal Accidents in Canada, 1924

THE March, 1925, issue of the Canadian Labor Gazette, published by the Dominion Department of Labor, contains the report of the number of fatal industrial accidents occurring in Canada during 1924 (pp. 319-326).

The record shows a smaller number of fatalities in 1924 than in the previous year, which is in part accounted for by a reduction in the number of employed persons. In both years the logging industry held the highest fatality record in proportion to the number employed while nonmetallic mineral mining and quarrying was second.

The following tables show the fatal industrial accidents in Canada in 1923 and 1924 by industry and those in 1924 by causes:

FATAL INDUSTRIAL ACCIDENTS IN CANADA IN 1923 AND 1924, BY INDUSTRY

Industry group	1923 ¹		1924	
	Number	Per cent of total	Number	Per cent of total
Agriculture.....	129	9.1	93	7.3
Logging.....	195	13.8	209	16.5
Fishing and trapping.....	29	2.1	33	2.6
Mining, nonferrous smelting, and quarrying.....	187	13.2	173	13.6
Manufacturing.....	198	14.0	163	12.8
Construction.....	177	12.5	195	15.4
Transportation and public utilities.....	372	26.3	310	24.4
Trade.....	24	1.7	12	.9
Service.....	61	4.3	27	2.1
Miscellaneous.....	40	2.8	55	4.3
Total.....	1,412	100.0	1,270	100.0

FATAL ACCIDENTS IN 1924, BY CAUSE

Cause	Number	Per cent of total	Cause	Number	Per cent of total
Prime movers.....	48	3.8	Tools.....	8	0.6
Working machines.....	46	3.6	Moving trains, vehicles, etc.....	236	18.6
Holisting apparatus.....	45	3.5	Animals.....	48	3.8
Dangerous substances.....	131	10.3	Falls of persons.....	179	14.1
Stepping on, striking against, or being struck by objects.....	25	2.0	Other causes.....	219	17.2
Falling objects.....	239	18.8			
Handling objects.....	46	3.6	Total.....	1,270	100.0

¹ Revised figures.

Fatal Accidents in Nova Scotia Coal Mines, 1908 to 1924

THE Department of Public Works and Mines of Nova Scotia, in its annual report on mines for 1924, presents data as to fatal accidents in coal mines in Nova Scotia in 1923 and 1924, classified by cause, and comparative data for the United States for 1923, which show that falls of roof or face, mine cars and locomotives, and gas and dust explosions caused the greatest proportion of such accidents in both countries. The number and per cent of the fatal accidents attributed to the various causes are shown in the following table:

NUMBER AND PER CENT OF FATAL ACCIDENTS IN COAL MINES IN NOVA SCOTIA, 1923 AND 1924, AND IN THE UNITED STATES, 1923

Cause	Fatal accidents in coal mines					
	Nova Scotia				United States	
	1923		1924		1923	
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent
Underground:						
Falls of roof or face.....	19	59.4	20	64.6	1,158	47.2
Mine cars and locomotives.....	8	25.0	4	12.9	413	16.8
Gas and dust explosions.....			4	12.9	372	15.1
Explosives.....			1	3.2	114	4.6
Electricity.....			1	3.2	75	3.3
Miscellaneous.....					163	6.6
Total.....	27	84.4	30	96.8	2,295	93.6
Surface:						
Haulage and cars.....	1	3.1	1	3.2	35	1.4
Machinery.....	3	9.4			26	1.1
Miscellaneous.....	1	3.1			96	3.9
Total.....	5	15.6	1	3.2	157	6.4
Grand total.....	32	100.0	31	100.0	2,452	100.0

The following table shows a comparison of coal-mine fatalities per 1,000,000 tons of coal and per 1,000 men employed, for Nova Scotia and the United States, over a period of 17 years:

FATAL ACCIDENTS IN COAL MINES OF NOVA SCOTIA AND OF THE UNITED STATES, 1908 TO 1924

Year	Fatal accidents in coal mines				
	Nova Scotia			United States ¹	
	Number	Per 1,000,000 tons ²	Per 1,000 men employed	Per 1,000,000 tons ²	Per 1,000 men employed
1908.....	43	6.09	3.32	6.05	5.54
1909.....	34	6.09	2.81	5.79	4.00
1910.....	31	5.05	2.81	5.66	5.31
1911.....	36	5.17	2.81	5.48	4.97
1912.....	34	4.55	2.56	4.41	4.46
1913.....	48	5.95	3.51	4.89	4.70
1914.....	37	4.71	2.53	4.78	4.66
1915.....	41	5.74	3.27	4.27	4.40
1916.....	29	3.98	2.65	3.77	3.93
1917.....	87	13.38	8.41	4.14	4.25
1918.....	122	20.68	11.77	3.80	3.94
1919.....	20	3.56	1.86	4.18	4.27
1920.....	26	4.08	2.30	3.45	3.78
1921.....	29	4.81	2.36	3.92	4.19
1922.....	19	3.66	1.55	4.15	4.00
1923.....	32	4.62	2.50	3.83	2.90
1924.....	31	5.57			

¹ Figures from U. S. Bureau of Mines' statistics.

² Of 2,000 pounds.

Industrial Health Program of a Canadian Paper Mill

AN ACCOUNT is given in *The Nation's Health*, March, 1925 (pp. 172-175), of the work of a pulp and paper mill in Canada in safeguarding the health of employees and their families.

The town in question is a company town with about 4,100 inhabitants, all the houses being owned by the company and rented to the employees. In 1922 a "mutual interest" board was formed consisting of an equal number of representatives of the men and of the management. This board meets every three months and recommendations have been made to the company in regard to such subjects as apprenticeship, pensions, vacations, first aid, and the work of the community and plant nurses.

The company maintains an emergency hospital in charge of a physician, an industrial nurse, and a community nurse. The physician not only looks after the health of the men but has also the sanitary supervision of the plant and the town.

Any employee who, while working, gets the least abrasion of the skin is required to report at once to the nurse for dressing, or if the hurt is sufficiently serious, to the doctor. The result has been an almost complete elimination of infections. In an eight months' period for which records were kept there were 63 lost-time accident cases which resulted in 982 days of lost time and 1,115 minor cases which required 1,088 redressings, an average of only about two dressings per case for these minor injuries. There was only one case of infection and this was the only case of injury in which the instructions to report to the dispensary were not followed. Infection represented only 1.6 per cent of all lost-time accident cases as compared with 12.5 per cent in the 10 months' period from October, 1922, to August, 1923.

All men with any symptoms of sickness are urged to report to the dispensary at once; and though few took advantage of this opportunity at first, the number of cases of sickness reported is now considerably in excess of the accident cases. During the eight months' period the nurse cared for 212 cases of minor ailments and referred 94 cases to the doctor for diagnosis and treatment.

If an employee is absent from work for two successive days the community nurse is notified and she visits the worker's home for the purpose of assisting the man and his family. In 182 cases the plant nurse was advised of cases of sickness in the homes of employees and these homes were visited at once by the community nurse. The work of the community nurse includes also work in preventing illness among the children in the preschool age and regular visits to the schools, to which she devotes about half of her time. During a four months' period the nurse inspected 3,633 children, referred 353 to the doctor and 274 to the dentist, and made 1,415 home visits. The management, with the cooperation of the school board, has also provided the services of a dentist one day a week to take care of the children's teeth and a monthly clinic for treatment of children with defective sight.

Fatalities in English Mines in 1924

THE Labor Magazine (London), in its issue for March, 1925, asserts that a preliminary statement issued by the mines department of the Ministry of Labor shows that the number of miners killed by accidents in British coal mines in 1924 was 1,192 as against 1,087 in 1923. By causes these fatalities were as follows:

Fire-damp or coal-dust explosions.....	35
Falls of ground.....	598
Shaft accidents.....	60
Haulage accidents.....	259
Miscellaneous.....	125
Surface accidents.....	115
Total.....	1,192

Fatal Accidents in Mines in India

THE report of the chief inspector of mines in India for 1923 shows that in that year there were 237 fatal accidents, causing 387 deaths. The causes of these deaths were as follows:

	Number of deaths
Underground:	
Explosions and ignitions of fire damp.....	75
Falls of roofs and sides.....	193
In shafts.....	32
Suffocation by gases.....	12
Explosives.....	11
Haulage.....	29
Underground machinery.....	2
Unclassified.....	11
Surface:	
Machinery and boilers.....	2
Surface railways and tramways.....	4
Electricity.....	3
Miscellaneous.....	13
Total.....	387

Coal mines accounted for the great majority (382) of these deaths, no other kind of mine being responsible for as many as 20 deaths. Unfortunately, the coal mines are becoming increasingly dangerous. In 1923 their death rate from accidents was 1.65 per 1,000 persons employed above and below ground, while for the preceding five years it had been 1.10. The death rate per 1,000,000 tons of coal raised was 17.69, while that of the preceding five years was 11.50.

The gradual increase in the rate of accident is lamentable. It is due to the increasing dangers of deeper and more intensive mining and a greater use of machinery. The training of new workers should receive more and more careful consideration, for during the first few weeks of employment miners are more liable to accident than later when they have become accustomed to working conditions.

Of the 387 persons killed, 297 were males and 90 females. Of those killed underground, 2 are classed as children under 12, the remainder as adults. Among these adults were 6 girls 15 years old, 8 aged 14,

7 aged 13, and 1 aged 12. One of the two classed as children was a girl of 10 and another a boy of 7. Recent legislation will, it is hoped, improve the situation indicated by these figures.

So far there has been no statutory interference with labor conditions in Indian mines, but on February 23, 1923, the Governor-General gave his assent to a new mines act (Act IV of 1923) by which, with effect from July 1, 1924, no person may be employed underground for more than 54 hours in the week, and no child under the age of 13 years may be employed in a mine or be allowed to be present in any part of a mine which is below ground. As to how far mine owners have prepared themselves for these changes, it may be mentioned that at a recent fatal accident inquiry it transpired that the deceased had been at work for 14 hours; the superintendent of a large group of collieries considers that the number of children underground in mines was never so large as at the close of the year.

The annual report of the Division of Insurance, of the Department of Banking and Insurance, Massachusetts, for the year ending December 31, 1923, presents in Part II certain data relative to workmen's compensation insurance for that State. A revision of the manual of rates effective December 31, 1923, was necessary on account of changed industrial conditions since the previous revision, effective January 1, 1921; also because of amendments to the law, and increased medical and expense costs. This resulted in a slight advance. The new rates of 1924 rates to those of 1923 being on the manual of 1923 and on the schedule basis 1.44. Instead of 800 classifications in the previous revision, 1923 was reduced to 600 partly to a consolidation of analogous hazards or operations and partly to the elimination of classes relating to obsolete and unimportant industries. Changes were made in 233 cases. Decreases in 233, no change in 83, and classifications numbered 12 and specially rated classifications 32. A further increase, uniformly adding 8 per cent to the rates at the beginning of the year, became effective July 1, 1924, on account of amendments to the compensation act which gave the compensation the date of the injury in cases in which the disability lasts 52 days. The expense ratio is given for the year 1923 for stock and mutual companies. For stock companies, actually writing workmen's compensation business, the expense ratio ranged for most companies from 23.30 per cent to 68.77 per cent. Two companies experienced a ratio of more than 98 per cent, while one showed a ratio of 17.25 per cent on their 1923 business, but these companies had not been previously engaged in the workmen's compensation business for the three years 1920 to 1922. The average expense ratio for stock companies for 1920 to 1922 was 41.63 per cent, a decrease of 2.55 per cent, and for mutual companies 21.08 per cent, a decrease of 4.53 per cent. The average for all companies was 31.94 per cent as against 36.36 for the preceding year.

A table is given showing the audited pay rolls for policies issued in 1920, 1921 and 1922; also the audited earned premium, losses incurred, per cent of earned premium, and loss cost per \$100 of pay roll for the same years. The audited pay rolls of policies issued by stock companies in 1920 aggregated \$7,004,075.51; in 1921 the total was \$6,812,611.13; while in 1922 the amount was \$6,665,969.40. For mutual companies the figures for the corresponding years were \$5,999,232.37, \$5,244,664.84, and \$6,016,709.02. In this connection it might be of interest to note that the largest amount of business among mutuals is transacted by the Liberty Mutual, which in the

WORKMEN'S COMPENSATION AND SOCIAL INSURANCE

Recent Compensation Reports

Massachusetts

THE annual report of the Division of Insurance, of the Department of Banking and Insurance, Massachusetts, for the year ending December 31, 1923, presents in Part II certain data relative to workmen's compensation insurance for that State. A revision of the manual of rates, effective December 31, 1923, was necessary on account of changed industrial conditions since the previous revision, effective January 1, 1921; also because of amendments to the law, and increasing medical and expense cost. This resulted in a slight advance, the estimated ratio of 1924 rates to those of 1923 being on the manual basis 1.05 and on the collectible basis 1.14. Instead of 966 classifications as in the previous revision, but 752 were made, due partly to a combination of analogous hazards or operations and partly to the elimination of classes relating to obsolete and insignificant industries. Increases were made in 385 cases, decreases in 239, no change in 82; new classifications numbered 12 and specially rated classifications 34.

A further increase, uniformly adding 3.4 per cent to the rates at the beginning of the year, became effective July 7, 1924, on account of an amendment to the compensation act which grants compensation from the date of the injury in cases in which the disability lasts 28 days.

The expense ratio is given for the year 1923 for stock and mutual companies. For stock companies actually writing workmen's compensation business the expense ratio ranged for most companies from 32.30 per cent to 66.77 per cent. Two companies experienced a ratio of more than 98 per cent, while one showed a ratio of 472.56 per cent on their 1923 business, but these companies had not been actively engaged in the workmen's compensation business for the three years 1920 to 1922. The average expense ratio for stock companies for the year was 41.63 per cent, a decrease of 2.55 per cent, and for mutual companies 21.08 per cent, a decrease of 4.83 per cent. The average for all companies was 31.94 per cent, as against 36.20 for the preceding year.

A table is given showing the audited pay rolls for policies issued in 1920, 1921, and 1922; also the audited earned premiums, losses incurred, per cent of earned premium, and loss cost per \$100 of pay roll for the same years. The audited pay rolls of policies issued by stock companies in 1920 aggregated \$706,407,516; in 1921 the total was \$653,186,113; while in 1922 the amount was \$695,269,704. For mutual companies the figures for the corresponding years were \$589,822,351, \$524,664,854, and \$601,679,036. In this connection it might be of interest to note that the largest amount of business among mutuals is transacted by the Liberty Mutual, which is the

name of the company created under the provisions of the compensation act, originally intended as the exclusive insurance carrier under the fund; the amount of the audited pay rolls on policies issued by this company in 1922 was \$298,937,636—almost one-half the total amount of business written by all mutual companies.

For the two types of companies the premiums earned and losses for the three years were as follows:

Kind of company	1920	1921	1922
Stock companies:			
Audited earned premiums.....	\$6,848,707	\$5,393,242	\$5,939,078
Losses incurred.....	3,720,706	3,662,371	4,027,362
Mutual companies:			
Audited earned premiums.....	5,599,866	4,283,141	5,022,639
Losses incurred.....	2,707,618	2,563,521	3,195,771

The per cent of earned premium corresponding to the losses incurred by stock companies in 1920 was 54, in 1921, 68, and the same in 1922; while for mutual companies the corresponding rates are 48 per cent, 60 per cent, and 64 per cent.

The loss cost per \$100 of pay roll was for stock companies 53 cents in 1920, 56 cents in 1921, and 58 cents in 1922; while for mutual companies the respective amounts were 46 cents, 49 cents, and 53 cents.

Another table shows for "approximately 200 classifications covering the most important lines of industry in Massachusetts, including manufacturing and contracting risks, commercial enterprises and public utilities," the amounts of the audited pay rolls, the audited earned premiums, the losses incurred, and the net loss cost per \$100 of pay roll. As determined by this last item, the greatest hazard attends iron and steel erection (frame structures), in which the net loss cost per \$100 of pay roll was \$11.32 in 1920, \$10.90 in 1921, and \$8.00 in 1922; similar work on tanks or silos involved a loss cost of \$6.48 in 1920, \$11.52 in 1921, and \$4.11 in 1922. The noticeable or even extreme fluctuations apparent are in a measure reflected in the audited pay rolls for the respective years, and it must be said of these that they disclose too limited an exposure to furnish a basis for any final conclusions. In boot and shoe manufacturing, with audited pay rolls ranging from \$80,000,000 to \$90,000,000, the net loss cost per \$100 of pay roll was 18 cents in 1920, 21 cents in 1921, and 24 cents in 1922. In cotton spinning and weaving, with audited pay rolls ranging from \$89,000,000 to approximately \$96,000,000, the loss cost was 43 cents per \$100 of pay roll in 1920, 46 cents in 1921, and 42 cents in 1922.

Nevada

THE Industrial Commission of Nevada presents in its biennial report for the period July 1, 1922, to June 30, 1924, current data as well as a summary of the experience for the 11 years covered by the compensation act. Compensation is elective in this State, but if elected, insurance is required in the State fund.

The number of subscribers for the fiscal year ending June 30, 1924, was 952 as against 879 for the preceding fiscal year. The number of full-time workers covered in the later period was 12,548, and in

1923, 12,071. In 1924 the pay-roll exposure was \$22,028,325.30 as against \$21,038,054.13 in the earlier year. Premium payments in 1924 totaled \$356,747.52, and in 1923, \$342,883.12. The total amount of compensation paid in 1924 was \$344,888 as against \$326,061.48 in 1923. The average cost of compensated cases was \$264.22 for 1,305 cases in 1924, amounting to \$1.57 per \$100 of pay roll; in 1923, 1,074 compensated cases cost an average of \$303.60 per case, or \$1.55 per \$100 of pay roll.

There are seven classes, one being made up of a single corporation. They are, with data for 1924: Mining, with 284 contributors and 3,229 full-time workers; ore reduction, with 66 contributors and 940 full-time workers; the Nevada Consolidated Copper Co. with 2 branches, copper mining and milling and smelting, and 2,374 employees; railroads, 8 in number, with 339 employees; utilities numbering 23 with 354 employees; State and municipal undertakings, as to which the law is compulsory, 99 in number, with 2,407 employees; and a miscellaneous class with 470 contributors and 2,905 employees. The largest number of compensated cases was in class 1, mining, the total being 598, the Consolidated Copper Co. coming next with 306 compensated cases, and the miscellaneous group following with 186. The highest average cost per case was in ore reduction, \$670.10 in 41 cases, utilities following with an average of \$375 in 21 cases.

A table showing the frequency of accidents by classes and extent of disability discloses the fact that mining had the heaviest accident rate in 1924, 196.35 per 1,000 full-time workers, or 10.14 accidents per \$100,000 of pay roll. There were 634 accidents in this class during the year, of which 10 were fatal or resulted in permanent total disability; 54 caused permanent partial disability; and 584 temporary total disability in excess of 7 days; only 40 were reported showing disability of less than 7 days. This figure indicates that accidents of brief duration must have been ignored in the reports. The Nevada Consolidated Copper Co. reported 128.9 accidents per 1,000 full-time workers or 7.68 per \$100,000 of pay roll; while class 2, ore reduction, had 43.70 accidents per 1,000 full-time workers or 2.29 per \$100,000 of pay roll. The other classes had from 3 to 7.6 accidents per 1,000 full-time workers in 1924.

Of the 30 persons killed in industrial accidents in 1924, only 19 left dependents. The actual and estimated cost in the fatal cases was \$112,917.60 or an average of \$3,763.92 per case. The medical benefits for the year 1924 averaged \$61.60 per case, 60 cents per \$100 of pay roll, or an average of \$10.09 per full-time worker.

The experience of the fund for 11 years shows a net premium income of \$3,315,460.93, and total compensation of \$2,933,269.93. There is a present balance of \$179,947.12; class 2, ore reduction, alone shows a net deficit, amounting to \$249.26. However, the experience of the last two years has produced current deficits in both mining and ore reduction, the total being \$54,064.09. This experience "indicates that an increase in rates in classes 1 and 2 may be necessary." The earned premium in other classes is reported as adequate, with a probability that in class 7, miscellaneous employments, a revision should be made reducing rates in certain employments whose experience justifies such action.

New Jersey

THE report of the Workmen's Compensation Bureau of New Jersey, included in the 1923-24 report of the department of labor of that State, shows that during the year 20,837 nonfatal and 249 fatal cases were reported. Of the nonfatal cases 20,606 were found to be compensable, 15 being cases of total disability, 5,073 of permanent partial disability, and 15,518 of temporary disability. Approved cases numbered 18,084, for which a total of \$3,520,998.41 was granted in compensation.

Oklahoma

THE Industrial Commission of Oklahoma, in its ninth annual report, covers the year September 1, 1923, to August 31, 1924. Its summary statement shows a constant and rapid growth in the number of accidents reported since the inception of the law, September 1, 1915, except for a drop in 1919 from 19,918 to 14,009, but rising to 22,348 in 1920, since which year the growth has been steady, reaching to more than double the 1920 total in the year 1924, when 45,826 accidents were reported. This does not include injuries resulting from occupational diseases or occurring in industries not covered by the act. The number of employers reporting was 10,350, of whom 10,000 carry compensation insurance and 350 are self-insurers.

The three causes producing the greatest number of accidents were stepping on or striking against objects (23,376), falling objects not being handled by the injured person (5,843), and machinery (1,394). Not all the injuries reported have been permanently classified as to nature and extent, sufficient time not having elapsed at the date of the report. However, 593 cases of a permanent nature, total or partial, have been determined. The aggregate time lost in 34,423 cases in which employees were found entitled to compensation was 480,440 working-days, involving a wage loss of \$2,214,561.69. Compensation paid aggregated \$1,387,855, besides \$579,462.41 medical aid, making total benefits of \$1,967,317.41.

The location of the injuries caused by the accidents is given in much detail, as well as the number of accidents in the various industries, time lost, daily wages lost, and compensation paid, classified by causes. As would be expected in a State having such specialized development, the largest number of accidents occurred in oil and gasoline refining, 12,409, oil-well drilling coming next with 7,443; lead and zinc mining followed with 6,172 accidents, building being next in order, with 4,943. Pipe lines distribution is charged with 1,583 accidents, wholesale mercantile industries coming next with 1,356, and coal mining with 1,316. The number of accidents does not, of course, indicate their seriousness, oil-well drilling being chargeable with the largest amount of lost time (19,082 weeks) and of compensation (\$298,237), far exceeding the totals for oil and gasoline refining, which led in numbers, but which caused lost time of but 4,598 weeks or \$74,035 in benefits, falling below a number of other classes in these respects.

Public Instruction as to Workmen's Compensation in Virginia

FOR the past two years the school children of Virginia have been receiving instruction, through a prepared catechism, as to the benefits of the State workmen's compensation act and how they may be secured.¹ A communication from Mr. C. G. Kizer, member of the Virginia Industrial Commission, states that through the cooperation of the superintendent of public instruction in allowing this catechism to become part of the regular course of instruction, more than "11,000 school-teachers and practically all of the school children of the State" have been interested.

The cost of disseminating the information for the two years has been less than \$350.

Mr. Kizer states that recently one of the leading universities asked for 250 copies of the act and of the catechism and a similar request came from the largest women's educational institution in the State.

Argentine-Belgian Workmen's Compensation Convention²

ON December 26, 1924, the Minister of Foreign Relations of Argentina and the diplomatic representative of Belgium in Argentina signed a convention providing for the reciprocal treatment of their nationals as regards compensation for industrial accidents suffered by workers resident in the contracting countries. This agreement provides that workers of one of the contracting countries injured in the territory of the other shall have the same right to compensation which the local law concedes to its nationals, even if the injured worker has left the country in which the accident and injury occurred. The convention is to become effective one month after the exchange of ratifications.

Czechoslovak Sickness, Invalidity, and Old-Age Insurance Law³

THE Czechoslovak Parliament has recently adopted an act on social insurance which was promulgated on October 9, 1924. The act does not, as was the original intention of the Government, include all the branches of social insurance at present existing in the Czechoslovak Republic, but merely provides for the reform of the sickness insurance system, especially as regards its organization, and introduces invalidity and old-age insurance on lines which closely follow those of the sickness insurance system. The insurance of workers against accidents and the pension system for private salaried employees, however, are left as independent branches of social insurance, and the same applies to the insurance of miners, new regulations for which were laid down by the act of July 11, 1922.

The act is to come into force, by order, on the same date as the act relating to insurance of persons working on their own account, which is now pending.

¹ An account of this new step was given in the October, 1922, issue of the MONTHLY LABOR REVIEW, pp. 171, 172.

² La Prensa. Buenos Aires, Argentina. Dec. 27, 1924.

³ The data on which this article is based are from International Labor Office, Czechoslovakia, 4 Act: Workers' Insurance, Geneva [1925?], Legislative series 1924, Cz. 4; and Industrial and Labor Information, Geneva, July 6, 1923, p. 39, and Dec. 8, 1924, p. 29.

Object and Scope of the Act

THE act provides for the compulsory insurance of workers against sickness, invalidity, and old age.

The insurance system created by the act covers all persons employed in territory of the Czechoslovak Republic, or on a vessel flying the Czechoslovak flag, on the basis of a labor, wage, or apprenticeship contract in any kind of work or service, provided that this is not merely a subsidiary or occasional employment. The system also covers home workers.

The following persons are exempt from compulsory insurance: Employees of the State, a Province, district, or commune, or of bodies corporate declared to be equivalent to these, including employees of railways open to general traffic, provided that in case of sickness they are entitled to their salary for at least one year or to benefits equal to those under the present act and that in case of invalidity or old age they are entitled to benefits at least equivalent to those granted under the present act. Persons insured in miners' insurance funds and foreign employees of official representatives of foreign countries established within the Czechoslovak Republic and of international commissions are unconditionally exempt from insurance.

The following persons are exempt from invalidity and old-age insurance: Persons who are over 60 years of age at the coming in force of the present act or who do not enter an employment subject to compulsory insurance until after having attained the age of 60 years; articulated pupils of lawyers or notaries, medical practitioners practicing temporarily and not on their own account; and persons liable to insurance under the legal provisions relating to pension insurance for private salaried employees.

For the purpose of insurance the insured persons are divided into wage classes corresponding to their earnings.

The number of persons who will be liable to compulsory insurance under the present act has been estimated at from 2,500,000 to 2,800,000.

Benefits

SICKNESS.—The minimum sickness insurance benefits have been fixed as follows:

Insured persons or members of their families who become sick are entitled to free medical treatment, including medicines and other therapeutical requisites, for a maximum of one year from the beginning of the sickness. Members of the family include the wife or husband, legitimate or illegitimate children, stepchildren, adopted or foster children who have not attained the age of 17 years, grandchildren, brothers and sisters, parents, grandparents, and parents-in-law, provided that such members of the family are living in the same household with the insured person, are mainly dependent upon his wages for support, and are not entitled to benefits in their own right.

If the insured person himself becomes incapable for work owing to sickness he is entitled to minimum sick benefits, from the fourth day of the incapacity for a period not exceeding one year, varying in amount from 2.70 to 24 crowns⁴ per day, according to his wage class.

⁴ Crown at par = 19.3 cents; exchange rate varies.

The by-laws of the individual sick funds may, however, raise these minimum rates within certain limits.

An insured woman or the wife of an insured person is entitled to maternity benefits, consisting of the free services of a midwife and, if necessary, of a doctor. An insured woman is also entitled to benefits, equal in amount to the sick benefits, for 6 weeks before and 6 weeks after the confinement, provided she is not otherwise entitled to sick benefits and refrains from all paid work. If she nurses her own child, she receives a nursing allowance amounting to half the sick benefits until the end of the 12th week of her confinement.

In the event of death of an insured person his dependents are entitled to funeral benefits equal to 30 times his average daily wage, but in no case less than 150 crowns. If a member of the family of an insured person dies, the insured person himself receives a funeral benefit which varies from 60 to 250 crowns, according to the age of the deceased person.

The act devoted special attention to curative treatment; indeed, its guiding principle throughout is not so much the granting of cash benefits as the improvement of the health of the nation and the prevention of disease in its early stages. With this object in view the act empowers insurance institutions to make provision in their by-laws for the following discretionary benefits: Treatment in a convalescent home for not more than a year after the cessation of medical treatment, treatment in cases of deformation, or loss of a limb, etc.

Invalidity and old-age.—Insured persons become entitled to invalidity and old-age pensions if, after paying 150 weekly contributions at least 13 of which must have been paid in the two years immediately preceding the receipt of benefit, they either become incapable of work or attain the age of 65. An insured person is deemed incapable of work if, as a result of sickness or other physical or mental infirmity, he is incapable of earning, in employment suited to his strength, ability, training, and previous occupation, as much as one-third of the sum usually earned in the same district by a physically and mentally sound worker with similar training. Insured persons who have attained the age of 65 are entitled to an old-age pension if they are not engaged in any work entailing liability to insurance under the present act or under the legal provisions relating to pension insurance of private salaried employees or insurance in miners' funds. The invalidity pension becomes due as from the day on which invalidity begins and the old-age pension as from the day on which the conditions for receipt of such a pension are fulfilled.

The invalidity and old-age pension consists of a basic pension of 500 crowns a year and an additional annual sum equal to one-fifth of insurance contributions paid. The pension is thus increased in proportion to the length of time for which contributions have been paid and to the wage class to which the insured person belongs. The State contributes a further 500 crowns to each invalidity or old-age pension. In addition, persons in receipt of an old-age or invalidity pension are granted an allowance equal to one-tenth of the pension for each child or orphan grandchild.

The widow or widower of a deceased pensioner is entitled, if unable to work, to a life pension equal to half the pension of the deceased. If the widow remarries she receives a lump sum equal to three times her widow's pension.

The orphans of a deceased pensioner are entitled, until attaining the age of 17 years, to an orphan's pension equal to one-fifth of the deceased person's pension if they are half orphans and to two-fifths if they are full orphans.

If an insured person dies before the expiration of the "waiting period,"⁵ his survivors are entitled to a lump sum equal to the value for one year of the invalidity pension to which he would have been entitled if he had completed the waiting period. If he dies after the completion of the waiting period or while in receipt of a pension, his survivors are also entitled to a lump sum equal to the value for one year of his invalidity pension, provided the survivors are not entitled to a widow's or widower's pension.

Sources of Income

THE funds required are raised through equal contributions from employers and employees and through State subsidy. For the present the amount of the weekly contribution for old age and invalidity insurance has been fixed at 4.30 crowns in the lowest wage class and at 8.80 crowns in the highest. These rates, however, may be changed by the national assembly on the basis of facts developed from statistical inquiries which are to be made at intervals of not less than five years. The amount of the contributions for sickness insurance is to be fixed by the Central Insurance Institution, and as a rule shall not exceed 5 per cent of the average daily wage.

The insurance contributions are to be assessed and collected by the sickness insurance institutions, which must be notified by the employers of the engagement and discharge of every employee and of the data requisite for fixing his wage class. The employer must pay the whole insurance contribution (his own share and that of the employees) in arrear to the proper sickness insurance institution, at the intervals prescribed by the rules, and may deduct the employees' share from their wages. For employees who receive no money wages and for apprentices the whole insurance contribution must be borne by the employer.

Organization and Administration

THE basis of the insurance system is constituted by the district insurance institutions, which are the carriers of the sickness insurance and are at the same time entrusted with certain functions in connection with invalidity and old-age insurance.

A district sickness insurance institution is to be established at the seat of every political authority of the first instance, which will take over the work of the sick funds already existing in the district. Works, guild, association, and friendly society sick funds may, however, continue operation as legal sickness insurance funds if they have a certain minimum membership (2,000 or 4,000). Employees in agriculture and forestry who are not insured in a district sickness insurance institution are to be insured in agricultural sickness insurance institutions.

The administrative bodies of the sickness insurance institutions shall be the general meeting of delegates, the governing body, super-

⁵One hundred and fifty "contribution weeks" constitute the "waiting period."

visory committee, and the director or manager. The general meeting is to consist of delegates elected for a term of four years by the insured persons. The governing body is to consist of 10 members, 8 of whom shall be elected by the general meeting of delegates from among the eligible insured persons and 2 by the employers on the supervisory committee, which also has 10 members, the employers having 8 representatives and the insured persons only 2.

The carrier of the invalidity and old-age insurance for the country as a whole is the Central Insurance Institution, which shall have its head office at Prague. The committee of the central institution is to consist of the president of the institution (who is appointed by the President of the Republic) and 40 members. Of these, 12 shall belong to the insured persons' group, 12 to the employers' group, and 16 shall be experts in social insurance. The governing body of the central institution is to consist of the president of the institution and 10 members, 3 of whom shall belong to the insured persons' group, 3 to the employers' group, and 4 to the experts' group. The management of the Central Insurance Institution is to be placed under a directorate of three persons appointed and dismissed by the committee of the institution.

The Central Insurance Institution shall also be the supervising authority for the sickness insurance institutions. The Central Insurance Institution itself is put under the direct supervision of the ministers of social welfare and of finance.

LABOR LAWS AND COURT DECISIONS

"Current Rate of Wages" Law of Oklahoma Declared Unconstitutional

THE United States District Court for the Western District of Oklahoma had before it on November 24, 1924, a case involving the constitutionality of sections 7255 and 7257 of the Oklahoma Compiled Statutes, 1921, which require contractors on public works to pay "not less than the current rate of per diem wages in the locality where the work is performed" to their employees. Three judges concurred in the view that the statute, being penal, was too vague and uncertain to stand. (*General Construction Co. v. Connally*, 3 Fed. (2d) 666.)

There was a penalty for each offense of not less than \$50 nor more than \$500 or imprisonment not less than three months nor more than six months, each day's violation constituting a separate offense. The phraseology of the act, "not less than the current rate of per diem wages in the locality," together with the stringent provisions for punishment was said to "deprive the complainant of his liberty and property without due process of law." The opinion continues:

It is obvious that the statutes requiring the payment of current wages and providing penalties for the violation thereof are so vague and indefinite as to render it impossible for any person to know or to be able to determine in advance for what acts he may be arbitrarily required to answer for a criminal prosecution. The statutes involved, in effect, delegate to the Labor Commissioner of the State of Oklahoma the arbitrary power to determine what acts of a contractor working under a contract with the State or municipality he conceives to be a violation of the statute justifying a criminal prosecution. The statute wholly fails to provide an ascertainable standard by which a contractor may determine in advance what is the current wage in any given locality.

Common justice demands that before a person may be deprived of his liberty by means of a criminal prosecution he must have been able to comprehend and to know in advance that if he commits certain acts such acts will violate the provisions of a penal statute, plain and definite in its statements.

Various decisions by the Supreme Court were cited in support of this view, and decisions by the State courts of Oklahoma applying the act were distinguished, the opinion concluding:

Clearly this is not due process of law, because due process of law involves the requirement that criminal statutes have definite ascertainable standards of guilt.

Old-Age Pension Law of Pennsylvania Held Unconstitutional

SOME account was given of the enactment in 1923 of old-age pension or assistance laws in three States in the MONTHLY LABOR REVIEW for November, 1923 (pp. 182-184). The States there named were Montana, Nevada, and Pennsylvania. The last-named law was declared unconstitutional by the Court of Common Pleas of Dauphin County some months ago, the case

going to the supreme court of the State, where the decision below was affirmed on February 2, 1925 (*Busser v. Snyder*, State Treasurer, 128 Atl. 80).

The constitution of Pennsylvania specifically provides that "No appropriations, except for pensions or gratuities for military services, shall be made for charitable, educational or benevolent purposes, to any person or community, nor to any denominational or sectarian institution, corporation or association."

It was on the ground of its conflict with this provision that the law was declared unconstitutional by the court below, and the supreme court found it in definite conflict, so that the statute must fall. Various arguments were introduced on both sides why the act should be sustained and why condemned, but, as stated by the court, "all these theories must be left untouched by judicial opinion; under our form of government, the legislature alone promulgates the policies of government and is alone responsible if judgment is not well exercised, socially as well as financially."

A distinction was made between the act in question, which was a pure grant conditioned on age, residence, and financial conditions, and retirement acts for public service employees. The latter are "founded on faithful, valuable services actually rendered to the Commonwealth over a long period of years, under a system of classification which the legislature has considered reasonable." Payments "are for delayed compensation," while the act in question entirely lacks any such basis. Neither can it be sustained as a poor law, substituting outdoor relief, or adding it to the present method of caring for poor persons and paupers under existing systems.

Under the act of 1923 the fundamental basis of poor laws (indigency or inability to work and without means of support) is swept aside as to certain persons, and for it is substituted an age limit for persons having property less than \$3,000, and an income less than \$365 a year, residence within the Commonwealth for certain length of time, discretion in the commission for the imperative mandate to poor directors, and other manifest substitutions.

The legislature in making such extensions has broken over the bounds of "the historical definition of poor persons," and entered the field of legislation forbidden by the section of the constitution above quoted.

The decree declaring the statute to be in contravention of this provision was therefore affirmed.

Constitutionality of Industrial Disputes Investigation Act of Canada

A BRIEF note appeared in the MONTHLY LABOR REVIEW for March, 1925 (p. 196), setting forth the fact that the Canadian industrial disputes investigation act had been declared unconstitutional by the Imperial Privy Council of Great Britain on account of its conflict with the British North America act, distributing legislative power among the Dominion and provincial Parliaments.

The Department of Labor of Canada has issued a volume of 304 pages¹ setting forth the judicial proceedings respecting the validity

¹ Canada. Department of Labor. Judicial proceedings respecting constitutional validity of the industrial disputes investigation act, 1907, and amendments of 1910, 1918, and 1920. Toronto electric commissioners v. Snider et al. Ottawa, 1925.

of this act and its amendments. An introduction summarizes the situation, while following chapters present the first judgment in the case by a single justice of the high court division of the Supreme Court of Ontario, Mr. Justice Orde, an adverse decision in a hearing for a permanent injunction, the judgment of the first appellate division of the Supreme Court of Ontario with a dissenting opinion, and the final judgment of the judicial committee of the Privy Council of Great Britain. Other chapters present the briefs for the two parties, while the argument before the judicial committee of the Privy Council is given at length, covering nearly 200 pages of the volume. The text of the act, a summary of proceedings under the act, the text of the controlling sections of the British North America act, and a summary of the arbitration acts of the different Provinces are also presented, making the volume a complete presentation of the situation as it exists and the basis on which the decision was reached.

As is well known, the statute undertakes to provide through agencies created under the Federal law of 1907, methods of determination of industrial disputes, restricting the right to engage in strikes or lockouts within certain limits, providing for the organization of boards of conciliation and investigation and establishing procedure. Strikes and lockouts prior to and pending a reference to the board were declared illegal and engaging in or inciting such activities subjected to penalties. The considerable departure from earlier practice and the exceptional procedure provided for, together with the very considerable success attendant upon the operation of the act, have given it a large degree of prominence in the industrial world. Summarizing the experience under the act, it appears that 619 applications have been made for the organization of boards, of which 441 were granted. The number of cases in which strikes were not averted or ended was but 37.

The constitutionality of the act had been challenged earlier in its history, but upheld by courts of the Province of Quebec in 1912 and 1913. The case in which the final decision was reached arose in connection with the refusal of the Toronto electric commissioners to recognize the authority of a board of conciliation and investigation which had been applied for by its employees in a dispute as to increased wages and changed working conditions. The board was constituted, the member representing the employer being named by the minister of labor, since the commissioners made no nomination and protested against the formation of any board.

It was the contention of the commission that the Dominion Parliament was without jurisdiction to enact a law binding on municipal authorities or affecting civil rights. Mr. Justice Orde granted a preliminary injunction on the application of the commissioners, accepting their contention and saying that the act "purports to interfere in the most direct and positive manner with the civil rights of employers and employees and also with the municipal institutions of this Province, both subject matters of legislation exclusively assigned to the Provinces." An application to make this injunction permanent was subsequently heard by Mr. Justice Mowat, who took the position that the British North America act made it possible for the Dominion Parliament to regulate industrial disputes because of their liability to affect wider areas than the Province in which they

arose. The act of the British Parliament, which has been referred to, became a law in 1867, and it was Mr. Justice Mowat's contention that industrial conditions not then possible of contemplation made necessary an interpretation of the act which would permit the enactment of the statute under consideration. This dissent between two justices of equal rank led to a reference of the case to one of the appellate divisions of the Supreme Court of Ontario. It was there decided, one justice dissenting, that the statute was valid, and that the commissioners must yield to the findings of the board constituted under it. Then followed the appeal to the judicial committee of the Privy Council in England.

The British North America act, which controls the situation, was an act of the British Parliament. Under it, the Dominion Parliament might "make laws for the peace, order, and good government of Canada" and specifically with regard to "the regulation of trade and commerce" among the 29 classes of subjects specifically placed within the scope of Dominion control. On the other hand, section 92 stated what were the "exclusive powers of provincial legislatures," including thereunder "property and civil rights in the Province" and "municipal institutions in the Province."

The judicial committee gave its judgment January 20, 1925, a bench of five justices unanimously deciding against the constitutionality of the disputes act on account of its conflict with the general law above noted. The act was summarized, and the fact pointed out that the Province of Ontario had a substantially similar act, of which it was said that "it is clear that this enactment was one which was competent to the legislature of a Province under section 92." In its application to the present case the Ontario act is "possibly competent not merely under the head of property and civil rights in the Province but also under that of municipal institutions in the Province." The propriety of the Dominion's action was urged by the counsel on the ground that "it was directed to the regulation of trade and commerce throughout Canada, and the protection of the national peace, order, and good government, by reason of (a) confining within limits a dispute which might spread over all the Provinces; (b) informing the general public in Canada of the nature of the dispute, and (c) bringing public opinion to bear on it." It was also suggested that the Dominion Parliament had power to legislate on account of the relation of the question to criminal law. This latter part, however, was briefly disposed of, as "it is obvious that these provisions dealt with the civil rights," with no purpose of making striking generally a new crime; nor were strikes within the ambit of the criminal law, at least "only on the ground of conspiracy. But there is no conspiracy involved in a lockout; and the statute under discussion deals with lockouts *pari ratione* as with strikes."

The disposition of the question as to the power of the Parliament "to make laws for the peace, order, and good government of Canada" was found more difficult. The appellate division, in its majority opinion, had ruled that the act in question was not "in its pith and substance" one relating to merely provincial matters covered by section 92 but related to industrial disputes which might develop into disputes affecting not only the immediate parties but the "national welfare, peace, order, and safety." The opinion also took

the position that the act "was not one to control or regulate contractual or civil rights, but that its object was to authorize inquiry into conditions or disputes, and that the prevention of crimes, the protection of public safety, peace and order, and the protection of trade and commerce, were of its pith and substance and paramount purpose."

The fifth judge in this court dissented, admitting the possibility of the spread and development of industrial strife so as to lead to a condition "comparable to war, famine, or rebellion," and justify Dominion action. But, as this judge stated, the present act could not be supported as an emergency order dealing with a matter of general Canadian interest and importance or with a power conferred under any of the specific heads of section 91. No emergency warranting special action was shown to exist within the history of the act, nor was it framed only to meet such an emergency. Anticipated possibilities were such that the question in actual issue is "whether regulation of civil rights or invasion of property rights in the fashion provided by the act, in order to bring about a uniform and desirable method of dealing with industrial disputes, admirable as its purpose might be, could be valid in view of the exercise of the powers given to the Provinces." No question existed as to the powers of the Provinces to make such enactments, and several of them have "legislation of much the same kind." There were no circumstances in the Toronto case sufficient "to justify Dominion interference if such interference affected property and civil rights." From these considerations this judge was of the opinion that the act could not stand, and the committee of the Privy Council concurred in that view. On examination of the evidence "they are of opinion that it does not prove any emergency putting the national life of Canada in unanticipated peril" and advised for the appellant commissioners of the city of Toronto, granting them the injunction desired against the board of conciliation, restraining it from taking any action in the case.

A brief but very suggestive account of "Government intervention in labor disputes in Canada" by the librarian of the Canadian department of Labor concludes the document. Provincial action is reviewed and the various steps taken by the Dominion Parliament in the field of conciliation and arbitration. The effectiveness of the act of 1907 in marshaling public opinion in support of the findings of the boards created under it was referred to, and a comparison was made between the method proposed by this act and those adopted in Australia. The statement is vouchsafed that "the attitude of the employers and workmen toward the act appears, on the whole, friendly, the watchful and half-suspicious attitude adopted at first having given way to one of cooperation in carrying out the terms of the statute and of seeking to amend it from time to time to facilitate procedure." Obviously, however, the future of such laws in Canada lies with the Provinces, of which Ontario, Manitoba, and Quebec have laws in this field, though the latter was made inoperative in 1922 by withholding appropriations. Nova Scotia also has a law, but it is apparently of little influence.

HOUSING

Reduction of Housing Accommodations through Demolition of Habitable Dwellings in Philadelphia

THE Philadelphia Housing Association has recently issued a study of the effect upon the housing problem of the clearance of sites in the built-over area of the city. This is a line of investigation which has hitherto been neglected, yet its bearing upon the problem of congestion is obvious.

In Philadelphia, during the two years 1923 and 1924, in the process of clearing sites for various purposes, 1,685 dwellings were destroyed, and as some of these were two and three family dwellings, lodging houses, and the like, the population dehoused was larger than the figures indicate on their face.

This loss reduced the number of family accommodations by 2,073, which, added to the rooming and lodging house population dehoused, gives a known loss of accommodation for 13,929 persons, though in all probability the actual number of persons dehoused exceeded the totals gathered by field investigators.

Unfortunately, a considerable proportion of the dwellings destroyed are in the low-rental group, so that there is little chance of their being replaced. Considering only one and two family houses, the rental distribution of those demolished within the two years was as follows:

Monthly rental:	1923	1924
Less than \$10.....	90	19
\$10 to \$19.99.....	227	244
\$20 to \$29.99.....	131	183
\$30 to \$49.99.....	106	208
\$50 and over.....	49	72
Total.....	603	726

A review of the demolitions of the past two years reveals that the city has lost a group of small, low-renting houses when such are in demand and vitally needed, and it emphasizes that no constructive thought has been given to the economic problems thus presented, in that no relief has been planned for the families thus discommoded. During these two years, of the 1,329 single and two family dwellings for which rental data were obtained, 67.3 per cent were in a rental range of less than \$30. With the extraordinary rental increase in the low-rental group during this same period, such high percentage of evictions within this range means an abnormal economic reaction. This is more pronounced in view of the fact that families living in these low-rental properties can not afford to increase their budget allowance for rent. The consequence being that a higher rental reduces funds needed for other essentials of normal living, or forces families into poorer accommodations.

Not all of the houses destroyed were a real loss to the city. About 159 were in bad structural condition, some were on unsewered streets, and some were on rear lots. The great majority, however, were either in good condition, or capable of renovation and repair. "The two-year loss in structurally sound houses reached a total of 1,086."

It is admitted that the growth of a city can not be retarded because necessary changes involve the destruction of houses already built, but the question is raised whether wise planning might not lessen the need for such destruction. It is suggested that a program of encouragement to the decentralization of industries might not only help to conserve low-rental houses in good structural condition but might also reduce community problems, traffic difficulties, and the like. Where such a program would not help the situation, the hardships of dispossession might be reduced by not making the clearance until the site is really needed. The municipal government has in several cases which are instanced cleared sites a considerable time before it was ready to proceed with the new uses of the land thus cleared, and families have in consequence been evicted months and even years before it was necessary. Continued occupancy of houses until new construction is nearly ready to proceed is advised.

The report closes with several recommendations, urging the establishment of a city commission with power to plan for the necessary growth of the city, the adoption of a zoning ordinance, and the extension of housing activities for the provision of a larger supply of low-rental housing. Two recommendations deal especially with the problems due to the demolition of existing housing.

In projecting public improvements an attempt should be made to conserve the present supply of low-priced dwellings, if not permanently, at least as long as possible, out of consideration for the rental population and as a feature of municipal economy.

Recognizing that congestion is increased by the demolition of houses, the city should extend its housing and sanitary inspection service, compel the landlord element to provide adequate sanitary equipment, and maintain hygienic occupancy on their premises.

Progress and Cost of Housing in England

THE English magazine, *Garden Cities and Town Planning* (London), gives in its issue for March, 1925, some data concerning progress under the housing acts of 1923 and 1924. Up to February 11, 1925, the total number of houses authorized under these acts was 210,851, of which 81,015 were to be built by local authorities and 129,836 by private enterprise. At that date a little over one-fourth (58,706) of the houses authorized had been completed, and 52,463 were under way, while the remainder had not yet reached the stage of actual construction. By far the larger number (181,594) were to be built under the terms of the 1923 act, which was carefully designed to encourage private enterprise to take up the task of supplying the needed housing.

There has been a considerable increase within the past year in the cost of the houses built with public subsidies. No data are available for those put up by private enterprise, but for those included in the contracts made by the local authorities the cost at various dates was as follows:

	Nonparlor houses	Parlor houses
January, 1924.....	¹ £386	¹ £445
June, 1924.....	419	458
October, 1924.....	450	501
December, 1924.....	440	530
January, 1925.....	439	495

¹ Pound at par=\$4.8665; exchange rate varies.

In all discussion of these increased prices, the increased wage rates in the building trades figure largely. According to the Ministry of Labor Gazette (London), for January, 1925 (p. 3), there were two such increases during the year.

In the building industry rates of wages generally were increased in February, under a cost of living sliding scale, by $\frac{1}{4}$ d.² or $\frac{1}{2}$ d. per hour, and again by a further $\frac{1}{2}$ d. per hour in August, while in London and certain provincial towns special additional advances were granted.

Speaking in answer to a question in Parliament, the secretary to the Ministry of Health said that the range of increase had been from $\frac{3}{4}$ d. to 2d. per hour, 2d. being the increase in London, but the most general advance being 1d. per hour. These increases would not greatly increase the total cost of erecting a house.

The effect on the cost of the house varies according to the character of the building and the output of work; but, assuming reasonable conditions, a general variation of $\frac{1}{2}$ d. per hour would represent between £4 and £5 variation in the cost of erecting the house.³

Since the most general increase has been 1d. per hour, according to the ratio here given, the general increase in cost should be from £8 to £10 per house, but the figures given above show an increase of £50 in the case of parlor, and £53 in the case of nonparlor houses. Under these circumstances, the labor organizations are urging an inquiry into the increases in the cost of building materials and other factors entering into the cost of a finished house.

Value of Building Construction in Great Britain

IN ITS issue for March, 1925, the Ministry of Labor Gazette (London) gives some data concerning the estimated cost of the buildings for which plans were approved during 1923 and 1924. With the exception of Government construction and buildings within the city and county of London, all building plans must be approved by the local authorities of the district in which they are to be carried out before work may begin. Statistics as to the estimated cost of the buildings for which the approved plans provide furnish, therefore, some indication of the amount of building activity and of the directions in which it tends.

For the two years under consideration, the total value of the plans approved, and the division of this amount among the different kinds of building were as follows:

	1923	1924
Dwelling houses.....	¹ £31, 978, 000	£37, 870, 000
Factories and workshops.....	3, 666, 000	3, 829, 000
Business and commercial building.....	4, 235, 000	4, 896, 000
Churches, schools, and public buildings.....	2, 994, 000	3, 319, 000
Other buildings, additions, and alterations.....	8, 124, 000	8, 590, 000
Total.....	50, 997, 000	58, 504, 000

¹ Pound at par = \$4.8665; exchange rate varies.

² Penny at par = 2.03 cents; exchange rate varies.

³ Great Britain. Parliament. House of Commons. Parliamentary Debates, vol. 180, No. 17, p. 658.

These figures show plainly the increased emphasis laid on housing, in the effort to relieve the extreme congestion. Before the war it was not uncommon for housing to account for about two-fifths of the annual amount spent in building; in both 1923 and 1924, over three-fifths went for this purpose. The increased expenditure for dwellings in 1924 as compared with 1923 was general throughout the country, only one district, Yorkshire, showing a decrease. Here the falling off is so slight as to be negligible, the figures being £4,317,000 for 1923 and £4,297,000 for 1924.

Data are also given showing the estimated cost of approved plans in 80 cities for which continuous records are available. The collection of building statistics was temporarily suspended during 1922, but with the exception of that year, the total value of plans approved, the amount devoted to dwelling house construction, and the proportion which this forms of the total for each year since 1911 are as follows:

ESTIMATED COST OF BUILDING IN 80 TOWNS OF GREAT BRITAIN

[Pound at par = \$4.8665; exchange rate varies]

Year	Cost of all building	Cost of residential building		Year	Cost of all building	Cost of residential building	
		Amount	Per cent of cost of all buildings			Amount	Per cent of cost of all buildings
1911.....	£11, 274, 000	£5, 187, 000	46	1918.....	£5, 256, 000	£212, 000	4
1912.....	10, 843, 000	4, 276, 000	39	1919.....	25, 130, 000	6, 572, 000	26
1913.....	12, 209, 000	4, 585, 000	38	1920.....	45, 829, 000	21, 953, 000	48
1914.....	11, 220, 000	4, 617, 000	41	1921.....	18, 669, 000	8, 297, 000	44
1915.....	7, 318, 000	1, 935, 000	27	1923.....	29, 063, 000	17, 182, 000	59
1916.....	5, 266, 000	631, 000	12	1924.....	34, 062, 000	21, 935, 000	64
1917.....	4, 938, 000	250, 000	5				

It will be noticed that during the war dwelling-house construction fell off almost entirely, and that it was not until 1920 that it regained its former relative position. In 1921, when the industrial depression was at its worst, housing maintained its relative position, but the total value of the building planned for was so diminished that it is doubtful whether, making due allowance for the change in the value of money, the amount expended for this purpose showed any increase over some of the pre-war years. Since then, the trend has been very decidedly toward residential building.

The statistics for 1923 and 1924 show a recovery, more particularly in respect of dwelling houses, the figures for which in 1924 almost equalled those for 1920, a year of much higher building costs, and accounted for nearly two-thirds of the estimated cost of all buildings for which plans were passed in these 80 towns.

COOPERATION

Condition of the Cooperative Movement in Illinois

AT THE 1923 convention of the Illinois State Federation of Labor, a bureau of cooperative societies was created for the purpose of "helping to build up a bona fide Rochdale cooperative movement" in Illinois and of protecting the membership of the trade-union movement of Illinois "from being imposed upon by those who would exploit the cooperative sentiment on the part of the workers for * * * their own selfish interests." The bureau made its report to the 1924 convention of the federation, giving an account of its activities and of the condition of the cooperative movement in Illinois.¹

Up to a few years ago a considerable proportion of the cooperative societies in Illinois were operating on what was called the "American plan," the main feature of which was the large measure of control over local societies which was vested in the Central States Cooperative Wholesale Society, to which they were affiliated. It was claimed that the conditions of the American distributive system made this modification of the strictly Rochdale plan necessary if the movement in this country was to develop "rapidly and safely."² It was found, however, that even this plan did not insure safety, for after operating under it for some time both locals and wholesale found themselves in difficulties. It was, accordingly, decided to reorganize the wholesale and, as rapidly as possible, place the constituent societies on a strictly Rochdale basis.

The failure in the past to accept only the Rochdale principle as the basis to develop the cooperative movement in Illinois has been due, principally, to the lack of an established educational policy. This lack of understanding of the right principle has also permitted such an institution as the Cooperative Society of America to capitalize the cooperative sentiment which had been developed, and to take from the people of Illinois and adjacent States millions of dollars, merely as a common-law trust company, without any semblance of control by the investors and by simply using the name "cooperative."

In reorganizing the Central States Cooperative Wholesale Society, and starting to again build the centralized movement in Illinois, from the ground up, the cooperators realized that their efforts would be useless unless they established an educational organization, separate from the commercial end of the movement. It was found, however, due to weakened condition of the movement, that some plan was necessary whereby the commercial and educational activities could lean on and support each other until each could stand alone.

On August 1, 1923, therefore, an educational department was established in the wholesale society and made permanent by the 1923 convention of the wholesale society. Any bona fide cooperative society may become a member of the educational department. Affiliated societies pay into the treasury of the department each

¹ American Federation of Labor. Illinois branch. Proceedings of forty-second annual convention, Peoria, Sept. 8-13, 1924, pp. 195-207.

² See account of the proceedings of the Second (1920) Cooperative Congress, given in the MONTHLY LABOR REVIEW for January, 1921, pp. 127-132.

month an amount equal to one-tenth of 1 per cent of the gross amount of business done by them. Trade-unions, educational societies, and other organizations interested in cooperation may become fraternal members. It is stated that the department has already "rendered valuable service to the movement in Illinois." It has assisted in reorganizing 10 stores from the old plan to the Rochdale basis, conducted an accounting service for 10 societies, organized 12 new societies, investigated 3 "fake" societies and put them out of business, furnished legal advice and prepared by-laws, and has organized and is conducting a cooperative death benefit society.³ It has been issuing a monthly paper, *The United Consumer*, but this, it is expected, will hereafter be published by a separate company organized for the purpose.

The director of the department reports as follows on the present conditions of the movement in the State:

In spite of the fact that the past year has witnessed the worst stagnation the mining industry in this State has ever known except in time of strike, it has been the most prosperous and most uniformly successful year the cooperative movement, as represented by the local societies, has ever experienced.

This condition can be accounted for only by the fact that with age and experience these societies are growing more efficient, are becoming more firmly established, are more capably demonstrating their ability to serve their members, and to the fact that more attention has been given to cooperative education and an organized movement in that direction than ever before.

With but few exceptions, the local societies have paid substantial dividends regularly every quarter throughout the year. In addition to that, each of them have added substantial amounts to their reserves and 15 of them have contributed liberally to the support of their educational movement. There are at the present time 89 consumers' retail societies operating in the State and practically all of these have every prospect of being permanently established institutions.

The turnover of these societies during 1923 aggregated approximately six millions of dollars. The new societies that have been organized, all of them through the activities of the Central States Cooperative Wholesale Society in carrying out its reorganization program, are showing encouraging progress although many of them have been forced to struggle against what to any other business would have been impossible conditions and obstacles.

During the year two conferences of the managers and directors of local retail societies have been held, which have been participated in by the representatives of about 30 societies. These meetings have made remarkable progress along the lines of promoting a better understanding of the problems of the local societies and of the movement in general; in bringing the various local groups into closer working agreements with each other, and in the organization of a permanent educational department.

There is any amount of unmistakable evidence on every hand that more and more people are becoming interested in the possibilities which the consumers' cooperative movement holds out to them for the sane, permanent, and equitable solution of our economic problems, which are daily becoming more seriously alarming.

The reorganization of the Central States Cooperative Wholesale Society has, during the past year, progressed as satisfactorily as could be expected under the circumstances. Every conceivable difficulty has been met and dealt with as patiently, as fairly, and as intelligently as we knew how.

In carrying out the reorganization program we have constantly had in mind the idea of saving as many of the existing retail stores as possible. In our desire to give the people in each local community every possible opportunity to organize a Rochdale cooperative society and take their store over, we have incurred losses that could have been avoided by disregarding the interests of the local people and disposing of the store to the best material advantage of the wholesale organization.

The support given the wholesale by the local retail societies has been only about 5 per cent of what it should have been. In addition to this, the wholesale has

³ *The United Consumer*, East St. Louis, February, 1925, p. 3.

been handicapped for working capital, due in the main to the liberal terms which have been extended to societies that have taken over retail stores, allowing them to pay the balance due the Central States on ridiculously small monthly installments and to the industrial depression resulting from the stagnation of the Illinois mining industry.

There are, however, many encouraging signs that lead us all to believe that there will shortly be a marked improvement in conditions. A better spirit of loyalty is being manifest on the part of many managers and with the improvement of industrial conditions we are hopeful for a marked improvement in the business of the wholesale. All of the retail stores have been finally disposed of with the exception of two and we hope to be able to negotiate the final closing of these two in the near future.

Cooperative Conditions in Russia¹

BUSINESS in Leningrad and Moscow is active. Most of the shops are open and display for sale every kind of attractive goods. There are three distinct types of distributive business: Private profit-making merchants, stores run by the city government, and the cooperative stores—representing capitalism, socialism, and cooperation.

The private shops are having a hard time. They are discriminated against in many ways. All buildings belong to the Government and the private merchant has to pay much higher rent than either of the other two. Then he is taxed, and he pays more for the house where he lives, and for his children's schooling, and for most everything he buys. The municipal stores and the cooperatives should have no trouble in competing with him. But he manages to exist.

Before the revolution, St. Petersburg was one of the great capitals of the world. The wealth of its ruling class was conspicuous. Some of its shops were truly palatial. New York City had no retail grocery stores to compare in ornate and expensive splendor with those of St. Petersburg. These beautiful buildings with ceilings 30 or 40 feet high, with their bronze statuary, carved wood interiors, elaborate plate-glass show cases, tiled walls, cut-glass and bronze electric-lighting fixtures, wine cellars and every sign of extravagance, have been turned over to the cooperative society. The finest of these on the Nevsky Prospect pays 1,700 rubles per month rental to the city, has 18 clerks and does a daily business of 5,000 rubles.

The local Moscow district society, the Moscow Central Union of Consumers' Societies (M. S. P. O.), the president told me, has 800,000 members and a daily turnover of 300,000 rubles. These figures are steadily increasing. (There are 4,000,000 population in the Moscow district.) It has 400 different establishments. Among these are 30 bakeries. The stores give the members from 4 to 15 per cent discount at the time of purchase. This is in place of a savings return. I was told that the cooperative stores sell at about 2 per cent cheaper than the stores run by the city government. There are large and attractive stores, as well as small shops, in all parts of the city.

Practically every sort of distributive business is carried on. We visited not only stores, but restaurants, bakeries, and other pro-

¹ Extracts from *Cooperation*, New York, February and March, 1925: "Letters from abroad: Russia, the laboratory of social experiment," by Dr. James P. Warbasse. Being an account, by the president of The Cooperative League of the United States of America, of his trip to Russia in August, 1924.

ductive plants. From both cities we made journeys out into the country and visited country villages. The cooperative store is found everywhere.

The great cooperative organization of Russia is Centrosoyus. Its yearly sales are estimated at over 200,000,000 rubles. The turnover of its member societies in 1923 was over 800,000,000 gold rubles. There is probably no cooperative organization in the world whose officers put in so many hours of work each day.

Its membership is composed of some 17,000 consumers' societies with over 7,000,000 members. It has many warehouses and 25 different manufacturing industries. It conducts a large insurance department and many noncommercial activities. Among the latter are education and propaganda. Its library contains 75,000 volumes. It conducts hotels and boarding houses for its employees; also a 40-bed hospital, with a staff of 6 specialists and 34 assistants; an analytical laboratory; an X-ray laboratory; ambulance stations; a dental clinic; a rest house in the suburbs of Moscow; and a sanatorium in the Crimea.

It is difficult to judge the factories of the local societies and of Centrosoyus by the standards of the West. Industry is different in Russia. Furthermore we must bear in mind that Russian industries have passed through a terrible ordeal. In the Russia of the Czar the workers were badly exploited by hard corporations. Then came the collapse of the old régime. Then chaos. Then the Kerensky régime, followed by the Bolshevik Government. Then came counter-revolution and the war made upon Russia by the Allies. And running through it all was poverty, famine, great suffering, and the disorder which was the price of hundreds of years of monarchistic corruption and oppression of the people. The cooperators have created some industries of their own, and they have rented and bought some plants from the Government. These plants, which were formerly capitalistic factories, were found in bad condition. Many had been closed for years. The machinery and equipment were fallen into decay. The buildings were dilapidated. But the cooperators have taken hold of them and got them going. Most are not running full capacity. Some are producing more than they did in the old régime.

One of the best plants we saw was the Moscow society's candy factory. It has 1,500 employees and turns out 10 tons of candy daily. This was a private capitalist's candy factory with 3,000 workers, before the revolution. The same technical superintendent is still in charge. Before the revolution, the superintendent got 1,000 rubles a month wages and workers averaged 20 to 30 rubles a month; now he gets 250 rubles a month and workers average 40 to 50 rubles.

A Centrosoyus soap factory at Moscow employs 100 workers. Before the war, as a private plant, it produced 360 tons of soap a month; now under the same superintendent it turns out 575 tons a month.

Everywhere, everybody said that the industries were improving, and it looked to me as though that is true. They are putting in new machinery and getting experience. But these Russian industries have a long way to go. The great majority of factories which we

visited would not compare in cleanliness, orderliness, or efficiency with the cooperative factories of other countries. The same is true of the stores and other businesses. Perhaps it is because Russia is different and the Russians do things differently.

One thing is striking: The workers even in the piecework clothing factories do not work as hard nor as fast as in the western countries. If I were employed in an industry, I should prefer the Russian leisurely method. It surely is not so hard on the worker as the intensive method. When I visited a big plant and engaged in a discussion with the superintendent, it was interesting to see the workers one by one leave their machines, join the group, and listen to the conversation. Occasionally a worker would answer a question that would throw some light on the subject. When I left they went back to their machines. That may be called human industry. But this humanizing of industry keeps up the cost of living in Russia. Many industries are losing money. Russia is not surrounded by a wall. Her industries have to compete with those of the outside world. If things can be brought in from foreign countries cheaper than they can be made in Russia, the Russian industries are demonstrated to be unprofitable. This is a serious fact and the Russians know it. They are doing much to introduce more efficiency in industry and thus to bring down costs of production, but it is a difficult problem.

There is everywhere a need also of efficiency in business administration. The Russians are idealists, artists, poets, philanthropists, but they are not efficiency engineers. When I saw a factory without broken windows, that looked clean and orderly, I could guess that it had a German technical engineer in charge, before I stepped in the door.

The Russian standard of cleanliness and order is different from the standard in western lands. One of my most amazing discoveries in Russia was just this. I never could get used to it. A Russian would open the door and say, "See how nice and clean and systematic and orderly this is!" And to my eyes at least it was not nice, it was not clean, and it was unsystematic and disorderly. At first I thought it was a joke. Then I discovered that the Russians meant it, and I realized that it was a much more serious matter.

This is purely a question of relative values.

The organization of the cooperative societies in the large cities of Russia is not easy to understand. They have great business, extensive plants, and many members. Undoubtedly many members have joined, paid for a certificate of stock, and are duly constituted members just as in other countries. On the other hand, one finds much confusion in this connection.

There seems to be a looseness of connection with the cooperative society. I can say that the situation here is different from what one finds in other countries, where every member of the cooperative society knows very definitely that he is a member; he knows when he joined; he has shares of stock; he knows what they cost and where the stock certificate is, and when the last membership meeting was held. Among the Russians with whom I talked this is not the case.

One problem I honestly tried to solve. It is the question of the relation of the cooperative movement to the State. It was for this that I really went to Russia. On this subject I talked with Mr.

Kintchuck, with many officials of Centrosoyus and the other organizations, with employees of cooperative societies, with members, with plain working people of different trades, with intellectuals, and with bourgeoisie.

We remember that there was a big and growing cooperative movement in Russia before the war. After the fall of the czarist régime it grew wonderfully. Then at its period of greatest development, in 1918 and 1919, decrees of the Soviet Government made the cooperatives a part of the machinery of the State; and in 1920 the distributive societies were nationalized. The societies were absorbed by the State and cooperation as a voluntary movement disappeared. In fact, we may say that, legally, cooperation ceased to exist in Russia. The State control of cooperation did not work. Then the Soviet Government theoretically gave back to the cooperatives their autonomy and freedom by the decree of April 7, 1921. Now, how much freedom from the State actually exists?

The critics of present Russian politics, and that means most of the cooperators of Europe, say that cooperation in Russia is under the control of the State.

On the other hand, the high cooperative officials in Russia claim that their movement has complete freedom and autonomy. The facts are that the Government did release the cooperatives from Government control in 1921, but they found themselves set at liberty in a world in which there is no liberty for anybody. Commerce and property in Russia are controlled by the State as much as possible. That should be perfectly clear because that is the policy of the Russian Government. But where is there a country in the world in which cooperation is absolutely free from the State? Not one. The corporation laws and the taxation laws of every country modify and control cooperation to a greater or lesser degree. And there is at least one European country outside of Russia in which the cooperative movement is simply an accessory of convenience to the dominant political party. That is Austria. In Belgium, politics is inseparably mixed with cooperation. In Italy the mixture is so close that the cooperative movement rises and falls with the Government.

Here are some observations which may or may not be of significance. The old leaders of the cooperative movement of Russia are no longer the leaders. The high places are occupied by men who are mostly communists and who were not trained especially in cooperation. It is said that the reason for this is that the old leaders were hostile to the Government and that if cooperation is to make headway it must have as its leaders men who can work with the present Government.

Cooperators in Russia have to take a sympathetic attitude toward Communism to make the path of cooperation smooth. But this does not mean that they are Communists or that they desire to see Communism exalted above cooperation. By one cooperative official I was informed that the high officials are appointed by the Government; the lower officers and employees are appointed by the society. This means, I take it, that the Government advises the cooperatives as to who would be most acceptable for a high position. The cooperatives are guided by that advice. It would be inexpedient for the

society to go ahead independently and elect somebody who might be distasteful to the Government.

I should judge that about 5 per cent of the members of the cooperative societies are Communists. This is surely not a great political influence when we realize that the big cooperative movement of Belgium requires that all of the members shall be members of the Social Democratic Party—100 per cent.

In many factories I observed two different superintendents, and have the idea that this is pretty prevalent. One is the head director, who is a political appointee and who is not appointed because of his knowledge of how to run a factory. The other is the technical superintendent—engineer; he was often the superintendent of the factory when it was owned by capitalists before the Revolution, and he knows the business. The first is the price the people pay for a dominating government. Russia is producing some technical managers, but the best I saw were from the neighboring countries or had been trained in German technical schools or industries. They all—foreigners and Russians alike—seem to be high-class men. These are the sort of men upon whom the hope of Russia rests. I have found them to be the kind of men in whom one would have faith. They inspire confidence. They have ability. They know how to do something better than anybody else. But as yet Russia has not enough of these men who are technical managers.

Let no one get the idea that Russia is rushing pell-mell toward autocratic Stateism. The Communists who would take it there are a small minority. The cooperators outnumber them ten to one. And the cooperative movement goes on. It is widespread and deep in the hearts of the people. It is not spectacular, it makes little noise, it is slow and steady; but it is accepted as a principle throughout Russia. Among the great mass of Russian workers, the farmers, cooperation is theoretically more acceptable than any other plan of action and practically it gives them greater satisfaction. Russia is a land of farmers. The working class of Russia is largely farmers. The small minority of industrial workers and theorists of the cities will not be able forever to dictate the form of organization under which these farmers shall live. Political parties come and go. They have their little reign of power and they perish. But cooperation is eternal.

Cooperation in Certain Foreign Countries

Argentina

THE International Cooperative Bulletin (London), of March, 1925, quotes *La Cooperacion Libre* (Buenos Aires) as authority for the statement that the chief council of the Museo Social Argentino has decided to establish a center of cooperative studies, the duties of which will include the following: The recording of everything of interest in the development of cooperation in Argentina; the supervision of the movement "to see that the principles of cooperation are honestly applied"; the spreading of the cooperative idea through lectures, meetings, etc.; the establishment of connections with similar institutions in other countries; the organization of a free consultative and advisory service for cooperative societies; and efforts toward the passage of cooperative laws.

Czechoslovakia

A RECENT report of the Czechoslovak Statistical Office (No. 63, 1924) contains data as to Czechoslovak cooperative societies engaged in farming their own or rented land. At the end of 1923 there were 346 such societies in operation, of which 274 were located in Bohemia, 64 in Moravia, 6 in Silesia, and 2 in Slovakia.

Italy

THE October-December, 1924, issue of the *International Review of Agricultural Economics* (Rome) contains (pp. 603, 604) a summary of the 1923 report of the Association of Italian People's Banks. Inquiry was made of 829 banks, but only 416 reported. These 416 had in 1923, a membership of 498,756, capital amounting to 385,534,000 lire¹ and deposits amounting to 3,969,405,000 lire.

Scotland²

DURING 1924, the Scottish Cooperative Wholesale Society had sales of £17,307,707,³ which represented an increase of £47,806 over those of the year before. Goods manufactured in the society's productive departments were valued at £5,453,360, an increase of £298,027 over 1923. A saving of £176,377 was realized on the year's operations, of which £137,354 is to be returned as dividends on purchases.

South Africa⁴

IN October, 1923, there were in existence in South Africa 166 agricultural cooperative societies, of which 80 were unlimited-liability and 86 were limited-liability societies. There were also 9 "co-operative trading companies" with a membership of 8,551.

There are maize-marketing societies in nearly every maize-producing district of the Transvaal and Orange Free State. On June 30, 1923, these societies numbered 25 and they had a membership of 8,112, and a business for the year of £577,293,⁵ of which £126,834 represented purchases of supplies for members. These societies, it is stated, are suffering a severe setback through having advanced to their members more than was realized from the crop, due to a great fall in prices.

There are four tobacco producers' societies in operation, one of which, that at Magaliesberg, has had conspicuous success. On June 30, 1923, this society had a membership of 3,582, a reserve fund of £42,866, and a business for the year of £91,481. Efforts have been made to establish other societies of this type but not until recently has it become apparent that the volume of business would justify such a step. The Government has now decided to assist financially the erection of cooperative stores for such societies.

¹ Lira at par=19.3 cents; exchange rate varies.

² *International Cooperative Bulletin*, London, March, 1925, pp. 90, 91.

³ Pound at par=\$4.8665; exchange rate varies.

⁴ *International Institute of Agriculture. International Review of Agricultural Economics*, Rome, October-December, 1924, pp. 609-613.

The export of fruit is handled by the Fruit Growers' Exchange. Considerable difficulty has been experienced in this field, due to the fact, it is said, that the organization began from the top and many of the local affiliated societies "hardly carry on active operations as cooperative undertakings at all."

Efforts to organize the cotton growers have met with considerable success. In 1922, "more than half of the cotton lint produced within the country was handled by cooperative societies." On June 30, 1923, there were four such societies (with a membership of 944) and a Central Cooperative Cotton Exchange formed in 1922.

An interesting form of cooperation has been adopted on a small scale by meat producers at two centers in Natal. Cooperative butcheries have been set up and members deliver slaughter stock to them in rotation. The owners of the stock receive the actual amount realized by retail sale, less a fixed sum deducted to pay for the butcher employed and for native labor, the butcher receiving a certain sum for each animal handled. This system is only suitable for small villages, but it is claimed for the two societies that their operations have resulted in a higher price for the supplier of the stock and a lower price for the consumer.

In most instances the marketing of wool is handled as a side line, but there are now three societies which specialize in this business.

Other cooperative societies include the Cooperative Wine Growers, a society with a membership of 2,800 but facing a period of depression; 17 dairy societies; and some 58 livestock societies. This last type of society is a new development, formed for the purpose of allowing poorer farmers to acquire livestock and farm implements, the credit of all members being pooled and loans obtained from the Government on the basis of this credit.

Spain

THERE are in affiliation with the Federation of Cooperative Societies of Northern Spain 43 local societies, according to an article in the March 1, 1925, issue of *La Coopération Belge* (Brussels). These societies in 1924 did a business amounting to 3,462,421 pesetas.⁶

The Federation of Catalonian Societies is a union of three provincial unions whose importance is shown by the following figures:

MEMBERSHIP AND BUSINESS OF SOCIETIES AFFILIATED WITH FEDERATION OF CATALONIAN SOCIETIES

Union	Number of affiliated societies	Number of members	Amount of business
Union of Barcelona.....	95	10,599	Pesetas 16,560,686
Union of Gerona.....	22	7,108	3,781,348
Union of Tarragona.....	13	1,552	1,276,244
Total.....	130	19,259	21,618,278

⁶ Peseta at par=19.3 cents; exchange rate varies.

Under the provisions of the Spanish land settlement act of August 30, 1917, 17 land settlements, mostly in mountainous districts, have been formed, according to the March 9, 1925 issue of Industrial and Labour Information (Geneva), and 10,500 hectares (25,946 acres) of land are under cultivation by the 1,215 settlers to whom allotments have been made. The purpose of the scheme is to distribute land to working-class families showing an aptitude for agricultural labor. After "five years of unbroken tenancy," such families become the owners of the land granted.

The new settlers are required to form a cooperative society to handle all matters relating to credit, savings, mutual aid, land improvement, buying of supplies, and marketing of produce. Such societies are subsidized by the State and are affiliated to the Federation of Cooperative Societies of Land Settlements.

WORKERS' EDUCATION AND TRAINING

Graduation of Building-Trades Apprentices in Cleveland, Ohio

FOR several years past, training courses for building-trades apprentices have been maintained in the Cleveland public schools, and in April of this year the first group of apprentices were publicly and formally presented with diplomas. The formal graduation is a new departure, and an elaborate commencement program was planned to give impressiveness to the occasion. The graduates numbered 150, divided among the classes in carpentry, plumbing, and bricklaying.

Courses in these three trades were the first to be established, and their work has proved so satisfactory that in January of this year courses in painting and electrical work were started. At present, according to the American Contractor of March 21, 1925, approximately 1,000 apprentices are attending the part-time courses in these five trades, and there is a long waiting list of boys anxious to enter as soon as places can be found for them.

The Cleveland plan involves the cooperation of the school authorities, the unions, the contractors, and the manufacturers and dealers in building materials. Part of the cost of carrying on the courses is met by the Federal Government, under the terms of the Smith-Hughes Act, and the remainder is provided by the local board of education. The building materials used are supplied by local manufacturers and dealers, free of charge. The course in each trade is under the supervision of a committee made up of representatives of the board of education and of the contractors and the unions in that trade.

The boy who wishes to become an apprentice must pass an examination by this committee to show that he is able, both physically and mentally, to meet the requirements of his trade. If he succeeds in this, he is indentured to a contractor, and thereafter for four years his trade work and school work are correlated so as to give him both the manual dexterity and the technical and theoretical training required. Throughout the entire period of apprenticeship four hours each week must be given to the school work, and for this his employer is to pay him the regular time rates. If a contractor finds himself unable at any time during the four-year period to employ a boy indentured to him, the boy is temporarily transferred by the committee to another contractor who can give him work, and in this way continuous employment is insured. This is considered an exceedingly important feature, for where no such system exists, an apprentice may find himself out of work for months at a time, and may as a natural consequence lose interest in the trade, look for a job at which he can be sure of steadier employment, and gradually come to prefer the work he thus takes up and drop out of the building trades altogether. Even when this does not occur, he loses just

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so much of the time which should have been devoted to training in the trade he has chosen. Under the Cleveland system, on the other hand, at the close of his apprenticeship the youth has had four years of steady work, so planned as to give him a progressive training in the fundamentals, both manual and technical, of his craft.

Protection of Apprentices in Austria

Pre-war Conditions

IN FEW of the European countries have industrial apprentices been so exploited and so inhumanely treated as in Austria until after the World War. According to a recent publication of the Lower Austrian Chamber of Labor,¹ a trade-union investigation made in 1892 brought out the fact that there was a regular trade in apprentices. Dealers traveled through Bohemia collecting boys, mostly orphans, whom they brought to Vienna, where they sold them as apprentices at from 2 to 3 gulden (about \$0.80 to \$1.20) per head to handicraft masters, especially to turners, carpenters, shoemakers, and machinists. The period of their apprenticeship was generally five years—years of abuse, hunger, and long hours. Their hours of labor were from 5 a. m. to 8 p. m., and after the regular hours of work they still had to clean up the shop. Their dinners usually consisted of potatoes and a soup made of flour and fat and on fast days (Fridays) they received only a dry bread pudding. At supper they were given a piece of bread and 4 kreuzer (about 2 cents). In addition to being fed poorly they were given plenty of beatings. Some of the handicraft masters employed as many as six apprentices and only one journeyman.

Owing to ill treatment many apprentices ran away from their masters to complain to the police authorities, but these generally gave the apprentices merely the choice between deportation to their home town or return to their brutal masters. A jury trial in 1896 of a master turner accused of ill treatment of his apprentices showed that of 43 boys apprenticed to him only 11 went through their full apprenticeship training and became journeymen while the remaining 32 ran away. Nevertheless the defendant was acquitted.

Although there were a few societies which had as their object the protection of apprentices, their activities covered only a relatively small number of apprentices.

Even after the amendment of the Industrial Code on February 5, 1907, the apprenticeship conditions continued to be bad. An improvement came with the rapid growth of the free (social-democratic) trade-unions, which in a periodical, "Meisterlehre," began to combat the abuses of the apprenticeship system. In this the trade-unionists were greatly aided by the journeymen's representatives in the guilds, who on January 1, 1906, founded the Central Office for the Protection of Apprentices. During the period of its existence (1906-1921) this office accorded protection to apprentices in about 9,000 instances. The office was, however, greatly hampered by lack of funds, since it depended entirely on the meager revenues of the journeymen's committees of the guilds.

¹ Austria. Kammer für Arbeiter und Angestellte in Niederösterreich. Lehrlingsschutz und Lehrlingsfürsorge der Wiener Arbeiterkammer 1921-1922. Vienna, 1923. 124 pp.

Postwar Conditions

AFTER the war the working conditions of apprentices improved rapidly. Various protective labor laws enacted between 1918 and 1921 have accorded them a number of rights. However, unless the trade-unions and works councils look after the protection of apprentices, the latter enjoy these rights in a limited degree only, because proper enforcement of the protective provisions has not yet been provided. The Federal law of July 14, 1921, on the introduction of factory inspection, provides that the factory inspectors shall see that the protective laws, decrees, and orders relating to the training of juvenile workers and apprentices are enforced, but until recently no special inspector has been assigned to this task.

In June, 1921, the Ministry of Social Welfare, the municipal administration of Vienna, the Vienna Chamber of Commerce and Industry, and the Lower Austrian Chamber of Labor held a conference for discussing measures for the reform of the apprenticeship system and of welfare work for apprentices. These conferences resulted in an agreement between the municipality of Vienna and the Lower Austrian Chamber of Labor to establish jointly a vocational guidance office in connection with an employment office for male and female juvenile workers. In addition, the Lower Austrian Chamber of Labor established in November, 1921, an office for the free legal protection of apprentices which absorbed the Central Office for the Protection of Apprentices.

By the end of 1922 the office for the legal protection of apprentices, founded by the Lower Austrian Chamber of Labor, had established 22 branches and had over 250 volunteer agents. The report for the period ending December 31, 1922, shows that it received 4,064 justified complaints from apprentices which led to intervention. Most of these complaints related to illegal hours of labor (1,116), too low or illegal remuneration (1,015), failure to grant a food bonus (426), board and lodging (363), insufficient vocational training (210), and refusal of vacation (110). Complaints of ill treatment were relatively few (37). In 594 cases the intervention of the office resulted in cancellation of the apprenticeship, while 510 complaints of apprentices were rejected as unjustified. In addition, approximately 1,800 apprentices called in person at the office to obtain advice as to wage rates, cost-of-living bonus, hours of labor, vacation, etc., and 350 made similar inquiries by mail. The office also purchased through the Austrian Cooperative Wholesale Society 5,000 overcoats and sold them at low prices to apprentices.

Having established the fact that the provisions of the industrial code with respect to the conclusion of apprenticeship contracts were being observed in rare instances only, the Lower Austrian Chamber of Labor informed the industrial authorities, the communes, and the guilds that it would insist on the strictest observance of these provisions. It also issued a leaflet "Memorandum for children leaving school and for their parents," 20,000 copies of which were handed to children leaving school. In this leaflet they were informed that the office for the protection of apprentices had drafted a model apprenticeship contract, that forms of this model contract were to be had free of charge at the office, and that, if a guild contract form was to be used the parents should, before signing the contract, bring it to

the office so that the form could be inspected for objectionable clauses. The Chamber of Labor also conducted a campaign among guilds with a view to having them adopt the chamber's model apprenticeship contract. This campaign was very successful as a large number of guilds sent in orders for forms of this contract.

This model contract provides for a 44-hour week, for apprentices under 18 years of age, with Saturday half holiday and for time and a half for overtime. It also provides for a vacation of two weeks with full pay for apprentices under 16 years of age who have worked one year, and of one week for those over 16 years of age.

According to article 98a of the Industrial Code the period of apprenticeship in factory trades may not be less than 2 and not more than 3 years, and in handicraft trades not less than 2 and not more than 4 years.

Remuneration of apprentices was formerly optional with the master. Article 99 of the Industrial Code merely provided that the apprenticeship contract should contain the conditions of "possible" remuneration of the apprentice. Under an amendment to the code enacted by the National Assembly on July 11, 1922, three new articles were inserted which fix the remuneration of apprentices as follows:

After the completion of the first third of the apprenticeship period apprentices are entitled to a remuneration to be fixed by the guild and journeymen's committees, with due consideration of the trade branches and of local conditions. In the case of boys apprenticed to masters not belonging to a guild the remuneration is to be fixed by a committee of the district industrial commission composed of two representatives each of employers and workers and after a hearing of employers' and workers' representatives of the trade group concerned. The rates thus fixed are to be revised semiannually. The pay of apprentices may also be fixed by collective agreement, provided that the rates so fixed are not less favorable than those fixed by the guild or the district industrial commission of the locality and trade in question. The rates fixed by guilds or district industrial commissions must be published in suitable form.

In individual trades in Vienna and Lower Austria a gross disproportion exists between the number of apprentices and journeymen employed, and this in spite of the fact that Article 100a of the Industrial Code provides that the guild by-laws shall regulate the ratio of apprentices to journeymen. The Lower Austrian Chamber of Labor has therefore petitioned the provincial governments to remedy this situation, with the result that these have issued orders to all political and municipal authorities not to approve by-laws of guilds which do not explicitly fix the proportion of apprentices and journeymen. This proportion varies greatly in the individual trade guilds. Most of them allow masters to employ one apprentice for every two journeymen employed, while in some trades the corresponding proportion has been fixed at 1 to 3, 1 to 4, or even 1 to 5. A few guilds also limit the total number of apprentices that any one master may employ.

From the preceding data it will be seen that, although the apprenticeship conditions are by no means entirely satisfactory, a great improvement has taken place as compared with pre-war times.

English Plans for Increasing Apprentices in Building Trades

AS PART of the campaign for increased house building, the English Minister of Health appointed in October, 1924, a national building industry committee to coordinate and more or less direct the work of a number of local committees of the same character. This committee has recently issued a memorandum concerning apprenticeship, the main points of which are given in the Ministry of Labor Gazette (London) for February, 1925.

In the main, the purpose of the memorandum is to secure the adoption of the recommendations made in April, 1924, by the national house building committee. (See MONTHLY LABOR REVIEW, July, 1924, p. 185.) To this end, it is urged that all contracts made by local authorities for the erection of houses should contain a stipulation that the contractor with whom they are made shall employ not less than one-third as many apprentices as journeymen employed by him on or in connection with the work with which the contract is concerned. "This clause is subject to an overriding maximum of one apprentice to three craftsmen in the area of the local building industry committee."

Special forms of indenture are offered for use in the case of those entering apprenticeship above the normal age limit, and it is suggested that such entrants should serve a probationary period before being accepted. The matter of training building laborers receives special attention.

The committee call special attention to the recommendations regarding the apprenticeship of building trade laborers and others having previous knowledge of the trade. These are described in the memorandum as "adult" apprentices, as they may be apprenticed at an age even beyond the extended age (20 years) permitted under the scheme for fresh entrants into the building trades. In another appendix the memorandum contains a suggested form of apprenticeship for such "adult" apprentices, which provides, *inter alia*, that the rate of wages for these apprentices shall be the agreed laborer's rate for the first year of the term of apprenticeship, and thereafter successively 80, 90, and 95 per cent of the current standard rate of craftsmen, until the end of the third year, when the full standard rate of craftsmen becomes payable.

The general plan involves cooperation with the educational authorities, who, the memorandum suggests, may often be able to help in selecting youths suitable for apprenticeship and likely to develop into good craftsmen. Further, plans are suggested for supplementing the craft training of apprentices by classes for technical training, held either in the daytime or in the evening.

The Minister of Health has issued a circular to the local authorities, indorsing the suggested proposals, and stating that he intends to make approval of housing schemes conditional upon their containing the apprenticeship clauses recommended in this memorandum.

STRIKES AND LOCKOUTS

Strikes in Buenos Aires, First Half of 1924

ACCORDING to an official report¹ on strikes in the Federal capital of Argentina, in the first six months of 1924 there were 36 strikes affecting 216,986 workers and causing a loss of 854,994 working-days and an estimated loss of wages amounting to 4,504,142.90 pesos.²

The following table shows the number of strikes and strikers and the average number involved in each strike according to industries:

NUMBER OF STRIKES AND STRIKERS IN BUENOS AIRES DURING THE FIRST SIX MONTHS OF 1924, BY INDUSTRY

Industry	Number of strikes	Strikers		Industry	Number of strikes	Strikers	
		Number	Average per strike			Number	Average per strike
Food.....	2	26	13	Polygraphy.....	4	580	145
Tobacco.....	1	12	12	Transportation.....	6	3,156	526
Textile.....	1	360	360	Glass, gypsum, earthenware.....	2	1,600	800
Clothing.....	4	184	46	Others not specified.....	3	209,964	69,988
Lumber.....	9	204	23				
Metallurgy.....	3	295	98				
Construction.....	1	600	600	Total.....	36	216,986	6,027

¹ This is not the exact sum of the items, but is as printed in the report.

Of the 216,986 strikers, 156,976 were men, 44,726 were women, and 15,284 were minors.

The following table shows the causes of the strikes, the number of working-days lost, and the estimated wages lost:

NUMBER OF STRIKES, DAYS LOST, AND ESTIMATED WAGES LOST, BY CAUSE OF STRIKE

[Peso at par=96.48 cents; exchange rate varies]

Cause of strike	Number of strikes	Number of working-days lost	Estimated wages lost
			Pesos
Wages.....	8	26,228	176,913.60
Hours.....	2	19,600	152,000.00
Organization.....	21	38,238	259,752.30
Labor conditions.....	1	50	250.00
Other causes.....	4	770,878	3,915,227.00
Total.....	36	854,994	4,504,142.90

In general, the strikes were unsuccessful from the standpoint of the workers, only 2 being won, while 2 were partly successful and 32 were lost.

¹ Argentina. Departamento Nacional del Trabajo. Boletín, Buenos Aires, November, 1924, pp. 1450, 1456.

² Peso at par=96.48 cents; exchange rate varies.

Strikes and Lockouts in Belgium in 1924

A SUMMARY of the strikes and lockouts occurring in Belgium during 1924, classified by industries and by causes, is given in the Belgian *Revue du Travail*, February, 1925 (pp. 290-292).

There were 186 strikes settled during the year, which affected 88,455 workers 82,747 of whom were strikers, the remainder, 5,708, being forced out of employment by the strikes. During the same period there were 2 lockouts affecting 1,700 workers. The 186 strikes involved 657 enterprises and the 2 lockouts 53.

The following table shows the number of strikes occurring in the various industries, the number of establishments affected, the number of strikers, and the number of other workers unemployed because of the strikes:

STRIKES IN BELGIUM DURING 1924, BY INDUSTRY

Industry	Number of strikes	Number of establishments affected	Number of workers involved		Industry	Number of strikes	Number of establishments affected	Number of workers involved	
			Directly	Indirectly				Directly	Indirectly
Book.....	3	2	35	—	Mines.....	17	86	48,879	2,983
Building.....	9	124	1,921	3	Paper.....	2	5	1,219	—
Chemical.....	12	13	1,214	52	Pottery.....	17	75	3,654	6
Clothing.....	13	59	1,239	68	Quarries.....	6	38	5,386	1,476
Commerce.....	2	3	186	5	Textile.....	28	36	2,609	702
Food.....	1	1	50	—	Transport.....	11	25	4,214	—
Glass.....	1	1	175	—	Wood and furniture.....	13	90	2,222	41
Hides and skins.....	13	14	715	52					
Instruments of precision.....	1	2	154	—					
Metal.....	37	83	8,875	320	Total.....	186	657	82,747	5,708

The most important cause of strikes was the demand for increased wages, which caused 136 strikes and involved 71,974 workers. The next most important causes were protests against the dismissal of workers and demands for reinstatement of discharged workers, which resulted in 22 strikes including 4,888 workers, and the question of labor organization, which caused 11 strikes and involved 1,127 workers. Of the remaining 17 disputes, which affected 4,758 workers, 7 were caused by trouble over the labor contract, 5 by trade-union questions, 4 by dismissal of foremen, and 1 was over the length of the workday. The questions of an increase in wages and of the establishment of a labor contract were each the cause of 1 lockout.

Forty-five strikes, with 11,229 strikers, were settled in favor of the workers, 78, with 26,484 strikers, in favor of the employers, and 63 strikes, with 45,034 strikers, and the 2 lockouts were ended by a compromise.

Labor Disputes in Finland in 1924¹

IN FINLAND 31 labor disputes involving 266 employers and 3,051 workers were reported as having taken place in 1924. Of these, 25 were reported as strikes, 3 as actually neither strikes nor lockouts, and reports conflicted as to the remaining 3 disputes.

¹ Finland. Socialministeriet. Social Tidskrift No. 3, 1925, pp. 200-207.

The greatest number of disputes (5) took place in the clothing industry, while the sawmill industry had the largest number of workers involved (766). Nine disputes affected less than 25 workers each and 11 over 100 workers. The most extensive dispute involved 400 workers. The average number of workers affected per dispute was 98.

Over half the disputes in 1924 lasted less than 2 weeks each, the average duration being 23.2 days. The number of days lost through disputes in 1924 was 46,709 as against 261,473 in 1923. The wage loss in 18 disputes for which data on this point were secured amounted to 1,474,367 marks.²

Reports covering 22 disputes affecting 2,066 workers, or 67.7 per cent of the total number of workers involved in the disputes of 1924, show that 1,186 or 57.4 per cent were organized into trade-unions.

Twenty seven or 87.1 per cent of all the disputes were caused by disagreements over wages. About half of all the disputes, affecting about one-third of the workers, resulted in a compromise.

Conciliators appointed by the Ministry of Social affairs officiated in 2 disputes.

² Finnish mark at par—19.3 cents; exchange rate varies.

CONCILIATION AND ARBITRATION

Conciliation Work of the Department of Labor in March, 1925

BY HUGH L. KERWIN, DIRECTOR OF CONCILIATION

THE Secretary of Labor, through the Conciliation Service, exercised his good offices in connection with 61 labor disputes during March, 1925. These disputes affected a known total of 34,388 employees. The table following shows the name and location of the establishment or industry in which the dispute occurred, the nature of the dispute (whether strike or lockout or controversy not having reached strike or lockout stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workmen directly and indirectly affected.

On April 1, 1925, there were 44 strikes before the department for settlement and, in addition, 34 controversies which had not reached the strike stage. Total number of cases pending, 78.

CONCILIATION AND ARBITRATION

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Name of company and location	Nature of controversy	Craft	Cause of dispute	Present status and terms of settlement	Duration		Men involved	
					Beginning	Ending	Directly	Indirectly
Lang & Sons, contractors, Columbus, Ohio.	Controversy	Building	Open or closed shop.	Pending.	1925 (1)	1925	25	75
Painters, paper hangers, and decorators, Memphis, Tenn.	do.	do.	Asked 25 cents per hour increase.	Adjusted. Present scale \$1 per hour continued.	Feb. 11	Mar. 1	350	
Carpenters, Greensburg, Pa.	do.	do.	Asked 12½ cents per hour increase.	Pending.			125	
Bricklayers, Des Moines, Iowa.	do.	do.	Asked \$2 per day increase.	Adjusted. Workers accepted \$12 per day; no increase.	Jan. 1	Feb. 25	250	
American Thread Co., Williamantic, Conn.	Strike	Textile	Wage cut of 10 per cent.	Pending.	Mar. 6		2,500	
Simbroco Cast Stone Co., Boston, Mass.	do.	Stonecutting	Jurisdiction.	Adjusted. Molders joined stone cutters' union.	Jan. 28	Feb. 19	15	135
Kaustine Plant, Perry, N. Y.	do.	Metal tanks.	Wage cut.	Adjusted. Compromised on rates and hours.	Feb. 23	Mar. 3	15	50
Progressive Silk Mills, Hazelton, Pa.	do.	Textile, silk	Discharge of foreman.	Adjusted. Foreman reinstated.	Jan. 21	Jan. 22	65	1
Building Trades, Columbus, Ohio.	Controversy	Building	Wages and conditions.	Pending.	(1)		(1)	
Public Service Electric & Gas Co., Kearny, N. J.	Strike	do.	Jurisdiction.	Adjusted. Compromise agreement concluded.	Mar. 9	Mar. 11	300	700
Sheet-metal workers, Indianapolis, Ind.	Controversy	do.	Wage negotiations.	Adjusted. Renew 1924 scale.	Jan. 1	Mar. 2	200	4,500
Building trades, Des Moines, Iowa.	do.	do.	do.	do.	Jan. 1	Mar. 18	650	2,200
Carpenters, Pottsville, Pa.	do.	do.	Asked 12½ cents per hour increase.	Pending.	Mar. 7		(1)	
Carpenters, St. Clair, Pa.	do.	do.	do.	do.	do.		(1)	
Carpenters, Ashland, Pa.	do.	do.	do.	do.	do.		(1)	
Carpenters, Shenandoah, Pa.	do.	do.	do.	do.	do.		(1)	
Carpenters, Tamaqua, Pa.	do.	do.	do.	do.	do.		(1)	
Carpenters, Mount Carmel, Pa.	do.	do.	do.	do.	do.		(1)	
Carpenters, Lansford, Pa.	do.	do.	do.	do.	do.		(1)	
Carpenters, Frackville, Pa.	do.	do.	do.	do.	do.		(1)	
Carpenters, Centralia, Pa.	do.	do.	do.	do.	do.		(1)	
Shoe workers, Derry, N. H.	do.	do.	do.	do.	Feb. 25	Mar. 12	35	
Lavy & Selzman, New York City	Strike	Garment industry	Conditions and recognition.	Adjusted. Recognition granted; no discrimination.	Feb. 1	Mar. 6	70	300
Artificial Silk Fabric Association, New York City.	do.	Textile, silk	do.	Pending.	(1)		700	
Steam fitters, Pittsburgh, Pa.	do.	Building	Asked \$1 day increase.	Adjusted. Compromised on 50 cents increase—\$11.50 per day.	Mar. 11	Mar. 23	63	

1 Not reported.

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS CONCILIATION SERVICE, MARCH, 1925—
Continued

Name of company and location	Nature of controversy	Craft	Cause of dispute	Present status and terms of settlement	Duration		Men involved	
					Beginning	Ending	Directly	Indirectly
Chicago Belting Co., Chicago, Ill.	Controversy	Leather	The right to organize.	Adjusted. Members renounced union. Four were discharged.	Mar. 14	Mar. 21	37	100
Famous Tailoring Co., Cincinnati, Ohio.	do.	Tailoring	Open or closed shop.	Unclassified. Open shop adopted; nonunion men employed.	Jan. 5	-----	65	10
New Sherman Hotel, Chicago, Ill.	do.	Carpenters and sheet metal workers.	Jurisdiction	Unclassified. Returned before arrival of commissioner.	Mar. 15	Mar. 19	-----	-----
Mount Hope Mines, Wharton, N. J.	Lockout	Metal mining	Union activity <i>v.</i> open shop.	Adjusted. Open shop in effect; no union activity allowed.	Mar. 16	Mar. 20	200	-----
Pleaters and stitchers, New York City	Controversy	Garment industry	Renewal of agreement	Adjusted. Wage and working agreement concluded.	Feb. 15	do.	2,500	-----
Plumbers, Indianapolis, Ind.	do.	Plumbing	Wage negotiations	Adjusted. Renewed 1924 wage scale for one year.	do.	Mar. 15	200	5,000
City Ice & Fuel Co., and North Columbus Ice & Fuel Co., Columbus, Ohio.	Strike	Ice and fuel industry.	Wages and new agreement.	Pending. General strike in effect.	Mar. 20	-----	80	235
Plasterers, Philadelphia, Pa.	do.	Building	Bonus withdrawn, asked \$2 increase.	Pending. Many firms have signed at \$14 per day.	Mar. 17	-----	400	-----
Selig Building, Indianapolis, Ind.	Controversy	do.	Jurisdiction of cork work.	Adjusted. Work divided between bricklayers and plasterers.	Mar. 15	Mar. 19	6	94
Painters, Pittsburgh, Pa.	do.	do.	Wage negotiations	Adjusted. Increase of 50 cents per day allowed—\$11.50.	Mar. 1	Mar. 20	(1)	-----
Shoreham Hotel, Washington, D. C.	do.	Walters	Nonpayment of wages	Adjusted. Commissioner advised agent as to procedure.	Mar. 17	Mar. 25	2	-----
Columbia Club Building, Indianapolis, Ind.	Strike	Bricklayers and plasterers.	Jurisdiction of stone work.	Adjusted. Setting of stone awarded to masons.	Feb. 30	Mar. 23	75	150
Western Electric Co., Kearney, N. J.	Controversy	do.	Violation of agreement alleged.	Pending.	Mar. 22	-----	(1)	-----
L. Candee Co., New Haven, Conn.	Strike	Rubber industry	Wages and conditions	Unclassified. Returned before arrival of commissioner.	Feb. 3	Feb. 9	50	-----
Lackawana Pants Mfg. Co., Scranton, Pa.	do.	Clothing	Conditions and wage cut	Adjusted. Agreed to pay former rate and to reinstate employees.	Mar. 16	Mar. 25	40	2
Plasterers and bricklayers, New York City.	Controversy	Building	Agreement and jurisdictional questions.	Pending.	Mar. 1	-----	(1)	-----
Republic Brass Co., Los Angeles, Calif.	Strike	Metal polishing	(1)	do.	(1)	-----	(1)	-----
Chas. B. Salyer Co., Boston, Mass.	do.	Clothing industry	(1)	do.	(1)	-----	(1)	-----
Edward Goldman, Boston, Mass.	do.	do.	(1)	do.	(1)	-----	(1)	-----
Building trades, Louisville, Ky.	do.	Building	Recognition of plumbers.	Unable to adjust. Strike still in effect.	Feb. 3	-----	250	-----

Plant	Industry	Asked 20 per cent increase	Pending	Feb. 14	700	2,000
Alum Wood Steel Plant, Conshohock- et, Pa.	Steel industry	Working conditions	Adjusted. Returned on compromise	Mar. 31	120	15
Dummer Mills, Brattleboro, Vt.	Weaving textiles	Recognition of molders,	Adjusted. Conditions improved and	Mar. 14	6	
Acme Co., Indianapolis, Ind.	Molders	etc.	men returned.			
I. Greenspan, New York City.	Upholsterers	Wages, hours, and con- ditions.	Pending.	Feb. 12	31	10
Howard Theater, Washington, D. C.	Employees	Nonpayment of wages	do.	Feb. 9	(1)	
Painters, Washington, D. C.	Building	Asked \$1 per day in- crease.	do.	Mar. 25	825	
Steamfitters, Washington, D. C.	do.	Conditions and renewal	do.	(1)	(1)	
Building trades, Boston, Mass.	do.	Asked 15 per cent in- crease.	Adjusted. Wage scale for 1924 re- newed; no increase.	Mar. 27	1,150	
Armour & Co., Wilson Co., Diamond Beef Co., Scranton Beef Co., Swift Co., Scranton, Pa.	Packing	Working conditions	Pending	Mar. 23	200	
Superior Doll Co., Robins Leather Goods Co., Perfect Doll Co., B. & S. Doll Co., Progressive Doll Co., Art Novelty Co., DeLuxe Co., and Star Doll Co., New York City.	Doll and infant shoes.	Asked 12½ cents per hour increase.	do.	(1)	130	
Building trades, Hazelton, Pa.	Carpenters, etc.	Wage negotiations	do.		450	
Painters, Indianapolis, Ind.	Building	do.	Adjusted. Agreed on 1924 scale of wages.	Feb. 15	300	
Bricklayers, Indianapolis, Ind.	do.	do.	Adjusted. Wages to be retroactive from April 1, 1924, on "tripper-run" service.	Feb. 1 Mar. 26	350	
Scranton Street Railway Co., Scrant- on, Pa.	Traction	Asked interpretation of award.	do.	Mar. 31	625	1,000
Stephen Sanford & Son, Amsterdam, N. Y.	Carpet weaving	Asked 20 per cent in- crease.	Unable to adjust. Mediation refused by company.	Mar. 25	900	2,500
Rivoli Silk Hosiery Co., Plainfield, N. J.	Hosiery knitting	Wages and conditions	Pending.	Mar. 17	40	210
Total					15,101	19,287

¹ Not reported.

IMMIGRATION

Statistics of Immigration for February, 1925

By J. J. KUNNA, CHIEF STATISTICIAN U. S. BUREAU OF IMMIGRATION

THE figures for February, 1925, show a total of 30,828 aliens (20,913 immigrant and 9,915 nonimmigrant) admitted and 10,214 (4,087 emigrant and 6,127 nonemigrant) departed, resulting in an increase to our alien population for the month of 20,614, compared with 15,776 in January, 1925. The number of aliens debarred and deported during February was 1,624 and 900, respectively, the principal cause for returning them to the country whence they came was that they were without proper visas under the immigration act of 1924.

The countries contributing more than 1,000 each of the 20,913 immigrant aliens admitted in February, 1925, were Canada (5,680); Germany (3,093); Mexico (2,427); Irish Free State (2,070); and England (1,124). Of the 4,087 emigrant aliens departed this month, 1,050, or 26 per cent, were Italians going to Italy.

About 16 per cent of the immigrants in February were under 16 years of age; 74 per cent were between 16 and 44 years of age; and 10 per cent were 45 years of age and over. Of the emigrants 5 per cent were under 16 years of age; 75 per cent were from 16 to 44 years; and 20 per cent were 45 years and over. Of these two classes, males constituted 55 per cent and females 45 per cent of the immigrants and males 78 per cent and females 22 per cent of the emigrants.

The country or area of birth of the 30,820 aliens admitted in February under the immigration act of 1924 is shown in Table 4. Eight aliens who arrived before the effective date of the act were admitted in February, 1925, making a total of 30,828 admissions during this month, as shown in Table 1.

Of the 18,984 nonimmigrant and nonquota immigrant aliens in February, 10,606 were admitted as natives of nonquota countries; 3,879 as returning residents; 2,123 as temporary visitors for business or pleasure; 1,109 as persons passing through the country; 901 as wives and children of United States citizens; and 366 of the other admissible classes not charged to the quota, including ministers and professors and their wives and children, Government officials, students and admissions to carry on trade under existing treaty.

TABLE 1.—INWARD AND OUTWARD PASSENGER MOVEMENT, JULY, 1924, TO FEBRUARY, 1925

Period	Inward					Outward					Aliens de- barred
	Aliens admitted			United States citizens ar- rived	Total ar- rived	Aliens departed			United States citizens de- parted	Total de- parted	
	Immi- grant	Non- immi- grant	Total			Emi- grant	Non- em- igrant	Total			
1924											
July.....	11, 661	11, 112	22, 773	20, 927	43, 700	8, 493	15, 747	24, 240	43, 812	68, 052	1, 929
August.....	23, 290	13, 966	37, 256	44, 791	82, 047	8, 633	14, 738	23, 371	37, 657	61, 028	2, 114
September.....	27, 941	20, 057	47, 998	57, 232	105, 230	8, 671	14, 580	23, 251	23, 849	47, 100	2, 359
October.....	27, 402	17, 822	45, 224	31, 474	76, 698	8, 941	12, 067	21, 008	19, 951	40, 959	2, 341
November.....	29, 345	12, 386	41, 731	22, 297	64, 028	8, 605	9, 645	18, 250	14, 741	32, 991	2, 149
December.....	28, 098	9, 612	37, 710	17, 219	54, 929	14, 288	10, 895	25, 183	17, 388	42, 571	2, 102
1925											
January.....	20, 952	8, 880	29, 832	16, 987	46, 819	6, 183	7, 873	14, 056	22, 538	36, 594	2, 001
February.....	20, 913	9, 915	30, 828	23, 186	54, 014	4, 087	6, 127	10, 214	23, 211	33, 425	1, 624
Total.....	189, 602	103, 750	293, 352	234, 113	527, 465	67, 901	91, 672	159, 573	203, 147	362, 720	16, 649

TABLE 2.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED TO AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES, JULY, 1924, TO FEBRUARY, 1925, BY COUNTRY

Country	Immigrant		Emigrant	
	February, 1925	July, 1924, to February, 1925	February, 1925	July, 1924, to February, 1925
Albania.....		55	6	258
Austria.....	73	504	18	231
Belgium.....	59	473	2	378
Bulgaria.....	5	113	3	164
Czechoslovakia.....	217	1,533	67	1,587
Danzig, Free City of.....	17	152		
Denmark.....	239	1,457	5	376
Estonia.....	9	90		5
Finland.....	45	300	25	253
France, including Corsica.....	275	2,601	53	769
Germany.....	3,098	26,982	227	1,829
Great Britain:				
England.....	1,124	8,970	382	4,782
Northern Ireland.....	32	883	3	171
Scotland.....	922	7,599	59	1,575
Wales.....	52	571	1	40
Greece.....	56	450	340	5,014
Hungary.....	61	419	18	522
Irish Free State.....	2,070	14,230	30	642
Italy, including Sicily and Sardinia.....	685	3,399	1,050	22,818
Latvia.....	17	136	4	25
Lithuania.....	45	302	8	354
Luxemburg.....	10	63	1	11
Netherlands.....	123	974	77	429
Norway.....	793	3,765	44	1,127
Poland.....	620	2,858	85	2,470
Portugal, including Azores, Cape Verde, and Madeira Islands.....	68	397	74	2,938
Rumania.....	145	774	39	955
Russia.....	157	1,096	51	286
Spain, including Canary and Balearic Islands.....	20	196	78	3,161
Sweden.....	966	5,717	60	628
Switzerland.....	140	1,197	17	330
Turkey in Europe.....	32	170		97
Yugoslavia.....	73	483	88	1,775
Other Europe.....	16	90	2	62
Total Europe.....	12,259	88,999	2,917	56,062

TABLE 2.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED TO AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES, JULY, 1924, TO FEBRUARY, 1925, BY COUNTRY—Continued

Country	Immigrant		Emigrant	
	February, 1925	July, 1924, to February, 1925	February, 1925	July, 1924, to February, 1925
Armenia.....	2	11		34
China.....	58	1,516	272	2,339
India.....	5	48	10	102
Japan.....	13	522	27	765
Palestine.....	25	206	3	56
Persia.....	9	26		19
Syria.....	44	212	10	273
Turkey in Asia.....	3	22	5	28
Other Asia.....	7	67	3	51
Total Asia.....	166	2,630	330	3,667
Egypt.....	12	93		13
Other Africa.....	18	196	2	96
Total Africa.....	30	289	2	109
Australia.....	9	182	40	249
New Zealand.....	5	91	13	110
Other Pacific Islands.....	1	20	3	24
Total Pacific.....	15	293	56	383
Canada.....	5,680	76,863	172	1,266
Newfoundland.....	50	1,244	25	288
Mexico.....	2,427	15,876	221	1,952
Cuba.....	68	858	114	1,308
West Indies (not specified).....	26	377	135	1,506
British Honduras.....		30		11
Central America (not specified).....	44	687	38	406
Brazil.....	30	295	15	123
South America (not specified).....	118	1,158	62	820
Other countries.....		3		
Total Western Hemisphere.....	8,443	97,391	782	7,680
Grand total.....	20,913	189,602	4,087	67,901

TABLE 3.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES, JULY, 1924, TO FEBRUARY, 1925, BY RACE OR PEOPLE, SEX, AND AGE GROUP

Race or people	Immigrant		Emigrant	
	February, 1925	July, 1924, to February, 1925	February, 1925	July, 1924, to February, 1925
African (black).....	28	555	63	744
Armenian.....	58	351		73
Bohemian and Moravian (Czech).....	143	1,201	72	1,188
Bulgarian, Serbian, and Montenegrin.....	39	331	87	1,121
Chinese.....	41	1,408	263	2,241
Croatian and Slovenian.....	37	324		695
Cuban.....	23	552	67	850
Dalmatian, Bosnian, and Herzegovinian.....	1	34	18	262
Dutch and Flemish.....	199	2,071	86	821
East Indian.....	2	33	9	68
English.....	3,276	36,980	593	6,354
Finnish.....	55	453	29	265
French.....	1,228	16,939	62	788
German.....	3,636	32,318	253	2,253
Greek.....	73	627	343	5,065
Hebrew.....	972	6,892	6	182
Irish.....	3,000	26,632	48	1,046
Italian (north).....	164	1,169	72	3,770
Italian (south).....	600	3,071	988	19,137
Japanese.....	14	498	26	730
Korean.....		14		23
Lithuanian.....	27	199	10	368
Magyar.....	60	624	31	632

TABLE 3.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES, JULY, 1924, TO FEBRUARY, 1925, BY RACE OR PEOPLE, SEX, AND AGE GROUP—Continued

Race or people	Immigrant		Emigrant	
	February, 1925	July, 1924, to February, 1925	February, 1925	July, 1924, to February, 1925
Mexican	2,394	15,497	220	1,916
Pacific Islander	2	3		3
Polish	271	1,989	90	2,442
Portuguese	70	434	74	2,987
Rumanian	37	296	40	905
Russian	89	971	61	503
Ruthenian (Russniak)	28	543	2	53
Scandinavian (Norwegians, Danes, and Swedes)	2,223	13,495	130	2,401
Scotch	1,708	19,154	105	1,999
Slovak	69	369	4	418
Spanish	26	384	105	3,657
Spanish American	136	1,414	88	849
Syrian	38	293	11	309
Turkish	9	47	6	131
Welsh	87	838	2	60
West Indian (except Cuban)	14	188	18	325
Other peoples	36	411	5	267
Total	20,913	189,602	4,087	67,901
Male	11,469	103,917	3,183	53,800
Female	9,444	85,685	904	14,101
Age group:				
Under 16 years	3,407	34,678	213	3,048
16 to 44 years	15,483	135,726	3,053	50,230
45 years and over	2,023	19,198	821	14,623

TABLE 4.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924, JULY, 1924, TO FEBRUARY, 1925, BY COUNTRY OR AREA OF BIRTH

[Quota immigrant aliens are charged to the quota; nonimmigrant and nonquota immigrant aliens are not charged to the quota]

Country or area of birth	Annual quota	Admitted			Number admitted July 1, 1924, to Feb. 28, 1925
		Quota immigrants		Nonimmigrants and non-quota immigrants	
		July to February	February	February	
Quota countries:					
Afghanistan	100				2
Albania	100	46		36	257
Andorra	100				4
Arabian peninsula	100	3			5
Armenia	124	11		14	76
Australia	121	97	2	98	1,972
Austria	785	460	61	63	1,129
Belgium ¹	512	325	34	108	1,301
Bhutan	100				
Bulgaria	100	80	3	10	171
Cameroon (British)	100				3
Cameroon (French)	100				
China	100	61	5	299	6,297
Czechoslovakia	3,073	1,600	223	152	2,930
Danzig	228	160	13	3	183
Denmark ¹	2,789	1,487	241	109	2,792
Egypt	100	64	6	10	147
Estonia	124	74	8	8	117
Ethiopia (Abyssinia)	100				
Finland	471	301	50	70	1,040
France ¹	3,954	2,199	225	314	6,332

¹ Including colonies, dependencies, or protectorates.

TABLE 4.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924, JULY, 1924, TO FEBRUARY, 1925, BY COUNTRY OR AREA OF BIRTH—Continued

Country or area of birth	Annual quota	Admitted			Total during February	Number admitted July 1, 1924, to Feb. 28, 1925
		Quota immigrants		Nonimmigrants and non-quota immigrants		
		July to February	February	February		
Quota countries—Continued.						
Germany.....	51,227	26,655	3,077	491	3,568	32,636
Great Britain and Northern Ireland ¹	34,007	18,990	2,346	1,841	4,187	42,475
Greece.....	100	69	6	149	155	1,477
Hungary.....	473	270	35	82	117	895
Iceland.....	100	50	4	—	4	56
India.....	100	39	3	25	28	381
Iraq (Mesopotamia).....	100	9	3	3	6	30
Irish Free State.....	28,567	15,317	2,196	195	2,391	18,798
Italy ¹	3,845	1,586	293	1,741	2,034	12,074
Japan.....	100	1	—	275	275	2,163
Latvia.....	142	81	4	10	14	209
Liberia.....	100	—	—	—	—	3
Liechtenstein.....	100	10	2	—	2	11
Lithuania.....	344	200	33	54	87	724
Luxemburg.....	100	61	12	7	19	127
Monaco.....	100	1	—	—	—	5
Morocco.....	100	9	1	—	1	22
Muscat (Oman).....	100	—	—	—	—	3
Nauru (British).....	100	—	—	—	—	—
Nepal.....	100	—	—	—	—	1
Netherlands ¹	1,648	866	91	122	213	2,368
New Zealand.....	100	66	6	28	34	682
New Guinea.....	100	—	—	—	—	1
Norway.....	6,453	3,814	794	172	966	5,706
Palestine.....	100	17	10	21	31	270
Persia.....	100	55	7	10	17	123
Poland.....	5,982	2,639	475	450	925	5,026
Portugal ¹	503	325	59	173	232	1,278
Ruanda and Urundi.....	100	—	—	—	—	—
Rumania.....	603	367	51	101	152	1,188
Russia, European and Asiatic.....	2,248	1,387	233	199	432	3,171
Samoa, Western.....	100	7	1	1	2	13
San Marino.....	100	—	—	—	—	—
Siam.....	100	—	—	2	2	21
South Africa.....	100	84	4	17	21	259
South West Africa.....	100	17	—	—	—	53
Spain ¹	131	91	13	289	302	3,027
Sweden.....	9,561	6,075	1,009	185	1,194	8,424
Switzerland.....	2,081	1,151	135	100	235	2,540
Syria and The Lebanon.....	100	60	15	56	71	562
Tanganyika.....	100	—	—	—	—	—
Togoland (British).....	100	—	—	—	—	—
Togoland (French).....	100	—	—	—	—	—
Turkey.....	100	95	19	110	129	736
Yap and other Pacific Islands.....	100	1	—	—	—	9
Yugoslavia.....	671	359	28	173	201	1,283
Total.....	164,667	87,792	11,836	8,376	20,212	173,589
Nonquota countries:						
Canada.....	—	—	—	5,549	5,549	77,920
Newfoundland.....	—	—	—	128	128	1,776
Mexico.....	—	—	—	4,120	4,120	26,383
Cuba.....	—	—	—	257	257	6,232
Dominican Republic.....	—	—	—	67	67	615
Haiti.....	—	—	—	3	3	123
Canal Zone.....	—	—	—	—	—	54
Independent countries of Central and South America.....	—	—	—	484	484	5,325
Total.....	—	—	—	10,608	10,608	118,428
Grand total.....	164,667	87,792	11,836	18,984	30,820	* 292,017

¹ Including colonies, dependencies, or protectorates.² Does not include 1,335 aliens from quota countries who arrived prior to June 30, 1924, and were admitted after that date.

FACTORY AND MINE INSPECTION

Arizona

THE State mine inspector of Arizona, in his thirteenth annual report, presents the following summary data as to the activities of his office during the year:

Mines and leases inspected, Dec. 1, 1923, to Dec. 1, 1924.....	128
Inspections made.....	323
Orders issued.....	21
Serious and minor accidents.....	887
Fatal accidents.....	40

Massachusetts

A STATEMENT submitted by the Department of Labor and Industries of Massachusetts shows that during the month of February, 1925, there were 4,304 inspections made by the department, 1,252 orders were issued relative to industrial health, industrial safety, and the employment of women and children. There were 28 prosecutions during the month, and verdicts of guilty were secured in 23 cases. Seven of the cases involved the employment of minors at prohibited processes and on dangerous machinery, and 12 involved the nonpayment of wages. During the month \$1,664 in wages was paid by employers to employees after complaint had been entered with the department.

During the year ending November 30, 1924, there were 65,987 inspections and reinspections made. Wages paid by employers to employees during the year after complaint had been entered with the department amounted to \$26,933.64.

Minnesota

A STATEMENT furnished by the Minnesota Industrial Commission shows that during the first quarter of 1925 the division of accident prevention made 5,817 inspections and issued 1,448 orders. Compliances were secured in 804 cases. The following statement shows the activities of this division by months:

Month	Inspections	Orders	Compliances
January.....	2,000	554	315
February.....	1,727	385	259
March.....	2,090	509	230
Total.....	5,817	1,448	804

New Jersey ¹

THE Bureau of Hygiene and Sanitation of the New Jersey Department of Labor, during the fiscal year 1923-24 made 13,859 inspections, of which 57 were of tunnels, 219 were of mines and quarries, 570 of mercantile establishments, 4,409 of bakeries and confectionery establishments and 8,613 were inspections of factories. As a result of these inspections, 4,301 orders were issued, 1,743 were complied with, and 163 were canceled.

A law was recently passed in New Jersey, extending the scope of the workmen's compensation law to include specified occupational diseases. It is expected that this law will have a "decided influence on the work of promoting better sanitary conditions in trades where workers are exposed to dangerous trade poisons. An improvement has already been noted in plant upkeep, maintenance and general sanitary practices in industries where trade poisons are used that come under the jurisdiction of this legislation."

Ohio

ACCORDING to the March and April, 1925, issues of Industrial Relations (Columbus, Ohio), during March the division of workshops and factories of the Ohio Department of Industrial Relations made 4,035 inspections as compared with 3,584 in February. Of the inspections made during March, 3,400 were inspections of factories, while the remainder were of buildings of various sorts. As a result of these inspections 965 orders were issued to insure compliance with the sanitation and safety laws.

During the same month the division of mines and mining made 293 inspections of mines (299 in February). Seven fatalities were also investigated.

¹ New Jersey. Department of Labor and Rehabilitation Commission. Annual report, for the year July 1, 1923, to June 30, 1924. [Trenton, 1924?], p. 23.

Month	Inspections	Orders issued	Orders complied with	Orders canceled
March	4,035	965	1,743	163
February	3,584	804	1,743	163
January	3,584	804	1,743	163
December	3,584	804	1,743	163
November	3,584	804	1,743	163
October	3,584	804	1,743	163
September	3,584	804	1,743	163
August	3,584	804	1,743	163
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April	3,584	804	1,743	163
March	3,584	804	1,743	163

WHAT STATE LABOR BUREAUS ARE DOING

AMONG the activities reported by State labor bureaus, the following are noted in this issue of the MONTHLY LABOR REVIEW:

Arizona.—Mine inspection, page 235.

California.—Recent employment statistics, page 141.

Illinois.—Recent employment statistics, pages 138 and 143; and industrial accidents in coal mines, page 182.

Iowa.—Recent employment statistics, pages 138 and 145.

Maryland.—Recent employment statistics, page 146.

Massachusetts.—Recent minimum-wage orders, page 109; recent employment statistics, pages 138 and 147; operations under the State workmen's compensation law, page 190; and factory inspection, page 235.

Minnesota.—The division of women and children of the Industrial Commission of Minnesota reports 926 regular inspections and 683 special investigations made for the first quarter of this year. The greater part of the work of the investigators has during this period been confined to the three largest cities of the State, only seven other towns having been visited. Two hundred and eighty-one orders were issued to secure compliance with various sections of the State labor law.

Two employers were prosecuted for violating the hour law regulating the employment of women, and in each case the employer was fined \$25. One employer was prosecuted for failure to keep a record of his employee's working hours; sentence was suspended in this case.

Wage adjustments in the amount of \$2,588.94 were paid to meet the requirements of Wage Order No. 12. This involved 55 firms and 139 woman and minor male employees.

Other activities noted in this issue of the MONTHLY LABOR REVIEW include work of the public employment offices, page 138; and factory inspection, page 235.

Missouri.—Report of the Negro Industrial Commission, page 32.

Nevada.—Operations under the State workmen's compensation act, page 191.

New Jersey.—Industrial accidents and diseases, page 183; operations under the State workmen's compensation act, page 193; and factory and mine inspection, page 236.

New York.—Average weekly earnings of factory employees, page 84; recent employment statistics, page 148.

North Carolina.—The Commissioner of the Department of Labor and Printing of North Carolina in the thirty-fourth report of the department recommends the enactment of a workmen's compensation law, safety legislation, laws for the better protection of children and women employed in industry, the application of the eight-hour day, especially in the more hazardous and "wearing" occupations, and legislative authority for the department of labor to act as a board of mediation and conciliation in labor disputes.

CURRENT NOTES OF INTEREST TO LABOR

Conditions in Foundries in 1924

THE International Molders' Journal for February, 1925, states that the year 1924 was on the whole a very unsatisfactory year in the foundry industry.

It was a year during which the trade depression was so severe at one time as to prompt the executive board to extend the out-of-work benefits. As a result, 137,310 out-of-work stamps were placed in members' due books during the year. The last quarter called for 38,545 out-of-work stamps, indicating how unsatisfactory trade conditions were in the last three months of the year.

The same authority states that the expenditures from the sick-benefit fund were much above the average.

As is usual with periods of dull trade, the sick benefits mount up, \$43,296.20 being paid out in sick benefits during the quarter, a total of \$208,114.40 being paid out during the year. Nineteen hundred and twenty-four was one of the years when the total disbursements for sick benefits exceeded the income, the payments exceeding the receipts by \$6,788.63.

From January 1, 1896, to December 31, 1924, the iron molders' union paid out \$4,753,060.65 in sick benefits.

Congress of Pan American Federation of Labor¹

THE Pan American Federation of Labor held its fourth convention in Mexico City, Mexico, December 4 to 9, 1924, under the chairmanship of the late Mr. Samuel Gompers. A résumé of the principal features of the resolutions which were adopted pertaining to labor, follows:

The congress pronounced in favor of a rise in wages, in order that the workers might be able not only to provide for their every-day requirements, but also to enjoy some measure of comfort and to effect economies for their old age.

On the proposal of the delegates of the Dominican Republic, the Congress requested the affiliated organizations to make every effort to secure the introduction of the eight-hour day in that country, and also to secure that native workers should be preferred to immigrants.

On the proposal of the delegates of Panama, the congress recommended that national workers should be preferred to workers from Jamaica and Barbados, who were often employed on the canal by reason of the lower wages which they were willing to accept.

On the proposal of the delegates of Guatemala, the congress demanded the introduction of the eight-hour day in Guatemala and the fixing of a minimum wage for workers and domestic servants; also the establishment of conciliation and arbitration committees and the recognition of the right to strike.

¹ International Labor Office. Industrial and Labor Information, Geneva, March 2, 1925, p. 26.

Difficulties in Compilation of Statistics in China

THE Chinese Economic Monthly, published by the Chinese Government Bureau of Economic Information, for February, 1925, contains an article (pp. 23-32) on the difficulties connected with collecting economic statistics in China. The Chinese bureau has been collecting statistics for about four years. Comparatively little has been published, however, as often after much laborious work in the collection and compilation of the figures they are found to be valueless. The lack of a common system of weights and measures presents the chief difficulty in the compilation of statistics, while the inaccuracy of population and production figures makes it impossible to check figures which might otherwise be usable. For example, the figures on production of some agricultural products represent only the amount which is handed to the Government as tax while for others records do not cover consecutive years or are shown only in percentages. If these figures on production were accurate, or if the statistics as to the population or those on imports and exports were more than estimates, it might be possible to check one set of figures by comparison with the others. In 1912 the Ministry of Agriculture and Commerce began to publish an annual statistical report dealing with manufactures and commerce and in 1914 the first agricultural statistics were published.

China as a whole is still largely controlled by custom and tradition. The annual rent of land which has been long under cultivation was fixed between landlord and tenant in most cases a couple of hundred years ago and since then the annual rent paid from year to year has varied according to the relation of the crop to the area cultivated. If, for example, the grain which actually ripens covers approximately seven-tenths of the area the crop is considered 70 per cent, and the rent for the year is set at 70 per cent of the fixed rent. An expert farmer can judge the percentage just before the grain is harvested. Taxes are reduced by the Government on the basis of the crop produced, a 10 per cent reduction being allowed when the crop is 40 or 50 per cent and so on. When crop-production figures for different years are compared for the same Province or district there are often great discrepancies found. This may be due to the inclusion of various kinds of grain under the same heading at different times or to wrong conversions of the local systems of weights.

In contrast with western countries where there are standard systems of weights and measures, those used in China differ between Provinces and districts and even in the same district there may be two or more weight units used for different purposes although the name of the unit is the same. The ordinary equivalent for a picul— $133\frac{1}{3}$ pounds—is correct only for the system of weights adopted by the Maritime Customs Service. In Shanghai, for example, a picul of rice is 150 catties and of wheat 135 catties, while in Yunnan the equivalents are 1,200 and 1,000 catties, respectively, and there are still other equivalents for beans, Indian corn, and other cereals. In Tsinan in addition to the pound avoirdupois there are five other units in common use.

In measurements there are similar differences. An "official mow" contains 6,000 square feet but there are many other kinds of mow which range from 8,000 to 17,500 square feet. One chih (foot) of

cloth measure is generally one-tenth larger than one chih of wood measure although there is no uniformity in either measure as between different cities. In some places the chih is of different length for measurements of cloth, silk, fine timber, ordinary timber used for building, and for furs, ribbon, etc.

The most confused systems of weights and measures are found in the large cities as merchants from different Provinces trading there bring their own measures with them and frequently these measures are modified to suit the local conditions and new units come into use which differ from the local and their own original measures. In Peking, where a new official unit of 32 centimeters has been established, 71 scales all supposed to represent the same unit of length were collected, the range being from 27 centimeters to 41.1 centimeters. These variations could apparently be multiplied indefinitely. The Central Government has adopted a uniform system of weights and measures but so far it has been rigidly applied only in the Province of Shansi, where the provincial authorities inspect the instruments used by the merchants once a year.

The second difficulty in collecting Chinese statistics is caused by the different values of the currency. Although the Yuan Shih-kai dollar has become the national coin, silver in taels is still extensively used, there being 72 standard taels in use in 72 large commercial centers. Even these do not include all the taels at these places, as each city has different taels for different purposes, while smaller towns have their own taels for local uses. The taels differ in both weight and fineness. The bankers know their relative par values but the rates of exchange depend upon the demand and supply of silver at the two localities concerned. In some places small silver dimes take the place of dollars but, like the dollars, the value varies according to the fineness of the silver. The use of brass cash has largely been given up and copper coins worth 10 or 20 cash are in general use. The exchange varies in different places, however, from less than 200 to 270 to the dollar. One tiao is nominally 1,000 cash or 100 coppers but its value also differs widely and is further complicated by the practice of giving the tiao a 2 per cent discount, making it worth 49.9 instead of 50 coppers. Comparison of prices, therefore, between different places depends upon what the monetary unit stands for in each case and in addition it is necessary to know how the copper-silver exchange rate at one place compares with that at the other place.

A writer in the North China Herald of August 19, 1916, is quoted as follows in his summarization of China's money troubles:

If a man comes into a shop one day when 93 cash constitute 100, and of these 93 cash 70 per cent should consist of large cash and 30 per cent small cash, and he makes a 29-cash purchase he will readily spend an hour or so arguing with the shopkeeper as to what 70 per cent of 93 per cent of 29 is; and since the Chinese have no actual system of reckoning on paper, it must all be calculated with the ubiquitous *suan pan*, or "abacus." Is there any wonder, then, seeing that a hundred cash are not a hundred, and a thousand cash not a thousand, that the Chinese say that if you take any given sum on the street and convert and reconvert it ten times, you will have nothing left, even if you start with a million.

The wages of laborers in most localities are paid in coppers and the necessities of life are also priced in coppers. There is such a close relation between these two in terms of that currency that a conversion

of the wages into dollar equivalents will give an entirely wrong impression unless the living conditions are known. Twenty-five cents a day, for instance, is a very low wage, but in a particular locality silver dollars may be so scarce and the necessities of life so low that the wages may in reality yield quite a surplus to the laborer.

In financial statistics the difficulty of converting foreign currencies makes it almost impossible to reach even an estimate of the indebtedness of China. Nearly all foreign loans to China are made in the currencies of the creditor countries and the fluctuation of the exchange rates makes it practically useless to calculate accurately sums below thousands of dollars or even hundreds of thousands.

Standardization in China is needed not only in the weights, measures, and currency systems but also in the names of commodities. Various commodities may be known by one name and one commodity may have several names. Zinc formerly had no name but was called by the same name as lead. Indian corn has a standard name but has totally different names in Peking, Shanghai, and Szechwan. It is therefore necessary to know the local names of all the different commodities in order to interpret statistical returns intelligently. In regard to manufactured articles the situation is still worse, so that it is nearly impossible to collect the market quotations on piece goods, for example, without sending samples of the goods to investigators. Much confusion has been caused, too, by the use of both Chinese and Japanese names for one article. Production figures in manufacturing plants, also, are seldom accurate, as often the full producing capacity of the plant is given instead of the actual quantity produced.

Geographical names are another cause of perplexity to the statistician as almost all cities of China have two names, one used under the Manchu dynasty and one under the Republic, while some have had their names changed more than once under the Republic.

Norwegian Profit-Sharing Scheme²

UNDER a profit-sharing scheme inaugurated by a Norwegian shipping company as an incentive to its workers to remain in its employment, members of crews on vessels in the American service who have been in the employ of the company for not less than 18 months are to receive 10 per cent of the net profits; members of crews on vessels in both American and European service 7½ per cent; and members of crews on vessels in European service who have been in the employ of the company for not less than 12 months 5 per cent.

Creation of National Economic Council in Portugal³

WITH a view to lowering the price of foodstuffs of primary necessity and of raw materials as well as coordinating the study of all economic questions a National Economic Council was recently created in Portugal. The council is composed of the Prime Minister

² International Labor Office. *Industrial and Labor Information*, Geneva, Feb. 23, 1925, pp. 32, 33.

³ *Idem*, p. 14.

and the Ministers of Finance, the Colonies, Labor, and Agriculture. The powers and duties of this council are as follows: (1) To take necessary steps for the standardization of the price of foodstuffs of prime necessity; (2) to look after the supply of domestic and imported goods; (3) to aid in the placement of unemployed persons in the national industries and in public works, and in the latter case drawing up collective labor agreements; (4) to adapt the instruments of national production to national interests as far as possible in accordance with existing legislation; and (5) to encourage and develop exports, and to discover markets for surplus products of the national industry.

Right of Association in Portugal ⁴

THE President of Portugal issued recently a decree broadening the scope of the legal recognition of the right of association. The main provisions of the decree are as follows: Class associations or trade-unions duly constituted may meet in federations or unions, provided they present two copies of their statutes to the Ministry of Labor. One of these copies will be sent to the persons concerned within 15 days, with a note of its registration. Without this copy federations or unions may not function. Upon being registered the said class associations or trade-unions acquire legal personality for all legal purposes, particularly as regards the conclusion of collective labor agreements. The Government will publish necessary regulations for the exact observance of this decree.

International Labor Office. Industrial and Labor Information, Geneva, Feb. 23, 1925, pp. 8, 9.

PUBLICATIONS RELATING TO LABOR

Official—United States

ARIZONA.—Mine Inspector. *Thirteenth annual report, for the year ending November 30, 1924.* [Phoenix, 1925]. 77 pp.

Data from this report are given on page 235 of this issue of the MONTHLY LABOR REVIEW.

CALIFORNIA.—Commission of Immigration and Housing. *Annual report [for the year 1924].* Sacramento, 1925. 34 pp.

Deals with the activities of the commission along three lines—complaints, camp sanitation, and housing. During the year the commission handled 2,262 complaints from immigrants, covering discrimination, injustice, neglect, and even family troubles. Of these, only 263 were found upon investigation to be unfounded. In the remaining cases, the trouble was either adjusted by the commission or referred to the proper agency for action.

ILLINOIS.—Department of Mines and Minerals. *Forty-third annual coal report of Illinois, 1924.* [Springfield, 1924?] 375 pp.

Certain data, taken from this report, on productivity of coal miners and on accidents in Illinois coal mines are given on pages 101 and 182 of this issue of the MONTHLY LABOR REVIEW.

MASSACHUSETTS.—Department of Banking and Insurance. Division of Insurance. *Annual report for the year ending December 31, 1923. Part II: Life, miscellaneous, assessment and fraternal insurance.* Boston, [1924?]. Public document No. 9.

Figures on workmen's compensation, taken from this report, are given on pages 190 and 191 of this issue of the MONTHLY LABOR REVIEW.

— Department of Labor and Industries. Division of Minimum Wage. *Report for the year ending November 30, 1923.* [Boston, 1924?] 15 pp.

This report is noted on page 109 of this issue of the MONTHLY LABOR REVIEW.

— — — Wage boards and their work: A handbook of information for wage board members. Boston, January, 1925. 8 pp. (Reprint.)

MINNESOTA.—Industrial Commission. *Workmen's compensation decisions, Vol. II, June 1, 1923, to December 31, 1924.* [St. Paul, 1925?] 413 pp.

This volume is the third of a series of reports of important decisions by the supreme court of the State and the industrial commission or its predecessor, the Minnesota Department of Labor and Industries, the first of the series having been issued as Bulletin No. 17 of the latter department. Taken together, they present a complete record of decisions since the workmen's compensation act became effective in 1913. The compilation is made "in the hope that it will prove of value to laymen and lawyers alike in determining the rights of insured and insurer under the provisions of the workmen's compensation act of Minnesota." Indexes and cross indexes of subject matter and lists of cases assist in making the contents of the volume available to the reader.

MISSOURI.—Negro Industrial Commission. *Third biennial report, 1923-1924.* Jefferson City, [1925?]. 71 pp.

Some discussion of the data contained in this report will be found on pages 32 and 33 of this issue of the MONTHLY LABOR REVIEW.

NEVADA.—Industrial Commission. *Biennial report reviewing the administration of the Nevada Industrial Insurance Act for period July 1, 1922, to June 30, 1924.* Carson City, 1925. 26 pp.

A summary of this report is given on page 191 of this issue of the MONTHLY LABOR REVIEW.

NEW JERSEY.—Department of Labor and the Rehabilitation Commission. *Annual report, for the year July 1, 1923, to June 30, 1924.* [Trenton, 1924?]. 64 pp.

Data from this report on industrial accidents, workmen's compensation, and factory inspection are given on pages 183, 193, and 236 of this issue of the MONTHLY LABOR REVIEW.

NORTH CAROLINA.—Department of Labor and Printing. *Thirty-fourth report, 1923-1924.* Raleigh, 1924. xiii, 439 pp.

Data from this report are given on pages 85, 139, 151, and 237 of this issue of the MONTHLY LABOR REVIEW.

OKLAHOMA.—Industrial Commission. *Ninth annual report, September 1, 1923, to August 31, 1924.* Oklahoma City, [1924?]. 28 pp.

A summary of this report is given on page 193 of this issue of the MONTHLY LABOR REVIEW.

UNITED STATES.—Civil Service Commission. *Forty-first annual report, for the fiscal year ended June 30, 1924.* Washington, 1924. lxii, 170 pp.

The report shows a total of 554,986 persons employed by the United States Government on June 30, 1924, of whom 474,427 were men and 80,559 were women. Only 64,120 of the whole number of Government employees are employed in the District of Columbia. The commission recommends the institution of personnel records, in order to facilitate the compilation of statistics relating to Government personnel. No such statistics have been compiled for 16 years.

The reports of the chief examiner and the director of research are included. In an appendix are given the text of the civil service act, and of the directory and the prohibitory statutes affecting the classified service; the various rulings and Executive orders; and statistics of examinations, appointments and retirements.

—Department of Commerce. Bureau of Navigation. *Merchant marine statistics, 1924.* Washington, 1925. iv, 73 pp.

Contains, among other statistics, data as to number of American seamen shipped, reshipped, and discharged; desertions; and average monthly wages paid on American merchant vessels of 500 gross tons and over, and wages of American and foreign seamen on vessels of 5,000 gross tons and over. Certain of these wage data are given on page 83 of this issue of the MONTHLY LABOR REVIEW.

—Department of Labor. Bureau of Labor Statistics. *Bulletin No. 365: Wages and hours of labor in the paper and pulp industry, 1923.* Washington, 1925. iii, 142 pp.

Advance figures from this bulletin were published in the MONTHLY LABOR REVIEW for March, 1924 (pp. 65-70).

— — — — *Bulletin No. 368: Building permits in the principal cities of the United States in 1923.* Washington, 1925. iii, 127 pp.

Advance figures from this bulletin were published in the MONTHLY LABOR REVIEW for June, 1924 (pp. 132-149).

— — — — *Bulletin No. 371: Wages and hours of labor in cotton-goods manufacturing, 1924.* Washington, 1925. iii, 43 pp.

Advance figures from this bulletin were published in the MONTHLY LABOR REVIEW for June, 1924 (pp. 77-80).

— — — — *Bulletin No. 377: Wages and hours of labor in woolen and worsted goods manufacturing, 1924.* Washington, 1925. iii, 36 pp.

Advance figures from this bulletin were published in the MONTHLY LABOR REVIEW for September, 1924 (pp. 31-36).

UNITED STATES.—Department of Labor. Women's Bureau. *Bulletin No. 42: List of references on minimum wage for women in the United States and Canada, compiled by Edna L. Stone. Washington, 1925. v, 42 pp.*

— Department of the Interior. Bureau of Mines. *Bulletin 190: Coal-mining problems in the State of Washington, by George Watkins Evans. Washington, 1924. vii, 79 pp.*

Includes statistics on wages in Washington coal mines from 1914–15 to November 16, 1917, output per man per day from 1913 to 1918, and accidents from 1903 to 1918.

— — — *Bulletin 246: Quarry accidents in the United States during the calendar year 1923, by William W. Adams. Washington, 1925. v, 76 pp.*

This bulletin is reviewed on pages 171 and 172 of this issue of the MONTHLY LABOR REVIEW.

Official—Foreign Countries

AUSTRIA.—Bundesamt für Statistik. *Statistisches Handbuch für die Republik Österreich. V. Jahrgang. Vienna, 1924. viii, 171 pp.*

The fifth volume of the statistical handbook of the Austrian Republic, covering the year 1923. Of the tables contained in the volume there are of special interest to labor those relating to the census of industrial establishments, cooperative societies, wholesale and retail prices, cost of living, collective agreements, employment exchanges, unemployment, labor disputes, trade-unions, and social insurance.

— Kammer für Arbeiter und Angestellte in Niederösterreich. *Lehrlingsschutz und Lehrlings-Fürsorge der Wiener Arbeiterkammer 1921–1922, von Anton Kimml. Vienna, 1923. 124 pp.*

A report describing the activities of the Lower Austrian Chamber of Labor in the interest of the protection of apprentices. The contents of the report are discussed in an article in the present issue of the MONTHLY LABOR REVIEW, pages 219 to 221.

BELGIUM.—Ministère de l'Intérieur et de l'Hygiène. *Annuaire statistique de la Belgique et du Congo Belge, 1922. Tome XLVIII. Brussels, 1924. [Various paging.]*

Statistical yearbook for Belgium and the Belgian Congo for 1922, including information on savings and retirement funds, cooperation, accidents, and strikes and lockouts.

CANADA.—Department of Immigration and Colonization. *Report for the fiscal year ended March 31, 1924. Ottawa, 1925. 59 pp. Sessional paper No. 13.*

According to this report, 148,560 immigrants arrived in Canada in 1923–24, of whom 20,521 were from the United States. The corresponding figures for the previous year were 72,887 and 22,007, respectively.

— Department of Labor. *Government intervention in labor disputes in Canada [by Margaret Mackintosh]. Ottawa, 1925. 22 pp. Supplement to the Labor Gazette, March, 1925.*

This pamphlet is briefly noted on page 203 of this issue of the MONTHLY LABOR REVIEW in an article on the constitutionality of the industrial disputes investigation act of Canada.

— — *Judicial proceedings respecting constitutional validity of the industrial disputes investigation act, 1907, and amendments of 1910, 1918, and 1920. Toronto electric commissioners v. Snider et al. Ottawa, 1925. 304 pp.*

A summary of this case is given on pages 200 to 203 of this issue of the MONTHLY LABOR REVIEW.

— (NOVA SCOTIA).—Department of Public Works and Mines. *Annual report on the mines, 1924. Halifax, 1925. 351 pp., illustrated.*

Data on coal production per man and on fatal accidents in Nova Scotia coal mines, 1908 to 1924, are given on pages 104 and 186, respectively, of this issue of the MONTHLY LABOR REVIEW.

GERMANY.—[Reichsarbeitsministerium.] Reichsarbeitsverwaltung. *Berufsberatung, Berufsauslese, Berufsausbildung.* Berlin, 1925. 319 pp. 32. Sonderheft zum Reichsarbeitsblatt.

With a view to promoting the growth of a rising generation of skilled workers, which is one of the most urgent problems in Germany, the German Federal Employment Service (*Reichsarbeitsverwaltung*) has, with the assistance of numerous experts, published the present handbook on vocational guidance, selection of the fittest for a given vocation, and vocational training. The first and greater part of the volume is given over to the subject of vocational guidance. It outlines the aims of vocational guidance, its legal basis, its extent, the cooperation of the schools and physicians, the problems and methods of psychology applied to vocational guidance, gives examples of how vocational guidance in large and medium size cities works in practice, and discusses unemployment among juvenile workers and vocational guidance in Austria.

The second part of the volume is given over to articles by technical experts on the practical training of apprentices in workshops and on examinations given in certain industrial establishments to applicants for work.

— Reichsversicherungsanstalt für Angestellte. *Bericht über das Geschäftsjahr 1920.* Berlin, [1921?]. 71 pp., illustrated.

— — *Bericht über das Geschäftsjahr 1921.* Berlin, [1922?]. 71 pp.

— — *Bericht über das zehnte Geschäftsjahr 1922.* Berlin, [1923?]. 24 pp.

— — *Bericht über das elfte Geschäftsjahr 1923.* Berlin, [1924?]. 24 pp., illustrated.

The reports of the board of directors of the German National Insurance Institute for Private Salaried Employees for the fiscal years 1920, 1921, 1922, and 1923. This institute is the carrier of the compulsory invalidity and old-age insurance system for private salaried employees in Germany. Since the years covered by these reports fall within the inflation period, the financial statistics contained in them do not give a clear picture of the financial situation of the insurance institute.

— (FREE STATE OF SAXONY).—Arbeitsministerium. Landesamt für Arbeitsvermittlung. Abteilung Berufsberatung. *Die praktische Berufsberatung unter besonderer Berücksichtigung der körperlich oder geistig Anormalen und Erwerbsbeschränkten.* Dresden, 1922. 83 pp.

A handbook on practical vocational guidance, published by the division for vocational guidance in the employment service of the ministry of labor of the Free State of Saxony. The volume lays down general guiding principles for vocational advisers, discusses the cooperation of the school and of the physician in vocational guidance, and differs from other handbooks on the same subject in that it gives special consideration to the vocational guidance and training of physically or mentally abnormal young persons.

— (PRUSSIA).—Statistisches Landesamt. *Statistisches Jahrbuch für den Freistaat Preussen.* 20 Band. Berlin, 1924. 12*, 265 pp.

The twentieth volume of the statistical yearbook for the Free State of Prussia, covering the years 1921 to 1923. Owing to the unfavorable financial condition of the State finances, the present issue of the yearbook has been considerably reduced in size but all the more important statistical tables given in former issues have been continued, although in more concise form. Of special interest to labor are the tables relating to housing, factory inspection, strikes and lock-outs, miners' wages, cost of living, prices, trade schools, labor colonies, and salaries of civil-service employees.

GREAT BRITAIN.—Census Office. *Census of England and Wales, 1921. Occupations [tables].* London, 1924. ii, 303 pp.

It is explained that special pains were taken in this census to secure an improvement in the statistics concerning occupations, and that for this purpose a

fuller and more scientific classification both of occupations and of industries than had been used heretofore was adopted. The classification is in general based upon the nature of the work performed, "though in the case of the productive occupations the nature of the material worked in has been embodied in the scheme as a factor essentially determining the character of the operations." Unfortunately, the new classification, differing fundamentally from that of the past, allows of little valid comparison between the occupations of the population in 1921 and at the dates of past censuses.

INDIA.—Department of Mines. *Report for the year ending December 31, 1923. Calcutta, 1924. v, 120 pp.*

Gives data concerning employment, output, accidents, prosecutions, and general conditions at the mines. A summary of the data relating to fatal accidents is given on page 188 of this issue of the MONTHLY LABOR REVIEW.

INTERNATIONAL LABOR OFFICE.—*Hours of labor in industry. United States. Geneva, 1925. 120 pp. Studies and reports, series D (wages and hours), No. 14.*

This study includes a survey of legislation regulating hours of work in the different States, and the hours worked under collective agreements in certain industries, supplemented by statistics published by official and private organizations.

— *The housing situation in the United States. Geneva, 1925. 5 pp. Studies and reports, series G (housing and welfare), No. 2.*

The report traces the housing situation in the United States from the development of the war stringency to 1923, deals with the various agencies of housing reform and betterment, and discusses tax exemption laws and rent restriction legislation. It is pointed out that while there is a great difference between the housing policies of the United States and Europe, this difference is of degree rather than of kind, and that the United States has for some time past been moving toward the European attitude.

The United States has slowly moved from purely sanitary regulation, requirements of light and space, water and sewage disposal, to control of rents, prohibition of eviction of tenants, remission of taxes on home building, and actual house construction through cooperative municipal enterprise. In short, in the United States housing has moved from a matter entirely of individual concern, a plaything of the market, the sport of supply and demand, to a matter of associated activity and community concern. Henceforth, the fundamental question will not be whether it is to be left to individual effort, but how much of this necessary housing reform, change or development, as the case may be, shall be left to voluntary and private associated effort and how much to compulsory official control by the community.

— *Safety devices for woodworking machinery. Great Britain and Switzerland. Geneva, 1925. 80 pp. Studies and reports, series F, second section (safety), No. 2.*

In this bulletin the International Labor Office has initiated a new type of service having for its object the bringing together of the work done in different countries in safeguarding machinery in different industries. It was thought that the work of accident prevention would be facilitated by thus making available the results of technical research and practical experience and that much duplication of effort might also be avoided. This bulletin aims to give an objective survey of experiments and safety measures in the woodworking industries.

ITALY.—Cassa Nazionale d'Assicurazione per gl'Infortuni sul Lavoro. La "Cassa Nazionale di Assicurazione per gli Infortuni sul Lavoro" dans son histoire et son développement actuel. Rome, 1924. 186 pp., illustrated.

This volume, published in French, has the object of making the reading public outside of Italy acquainted with the development and the beneficial activities of the Italian National Workmen's Accident Insurance Fund, the principal

carrier of workmen's accident insurance in Italy. It describes the creation and reorganization of the fund, accident insurance in agriculture, in the Italian colony of Erthrea, of Government workers, and of fishermen, social insurance in Fiume, and the activities of the fund through dispensaries and hospitals, and in an appendix gives a list of the publications of the fund and of the Italian laws, decrees, etc., on workmen's accident insurance and a bibliography of monographs on the same subject. The volume is richly illustrated with graphic statistical charts and photogravures of the offices and hospitals of the fund and of its clinical equipment.

ITALY.—Cassa Nazionale d'Assicurazione per gl' Infortuni sul Lavoro. Consiglio Superiore. *Gestione infortuni nell'agricoltura. Bilancio consuntivo dell'anno 1923.* Rome, 1924. 17 pp.

The annual financial report of the division of agricultural accidents of the Italian National Workmen's Accident Insurance Fund, for the year 1923.

— *Gestione infortuni nell'industria. Bilancio consuntivo dell'anno 1923.* Rome, 1924. 17 pp.

The annual financial report of the division of industrial accidents of the Italian National Workmen's Accident Insurance Fund, for the year 1923.

— Cassa Nazionale per le Assicurazioni Sociali. *Assicurazione obbligatoria per la invalidità e la vecchiaia.* Rome, 1924. 110 pp.

The text of the law of December 30, 1923, on compulsory invalidity and old-age insurance and of the regulations of August 28, 1924, for its enforcement.

— Ministero dell'Economia Nazionale. Direzione Generale del Lavoro e della Previdenza Sociale. *L'occupazione operaia e gli orari di lavoro nel luglio 1923.* Rome, 1924. xv, 171 pp. *Estratto dal Bollettino del Lavoro, Vol. XLI, Nos. 4, 5, 6.*

The results of an investigation by the Italian factory inspection service into the state of employment in July, 1923, as compared with that in July, 1920, and 1922, and into the hours of labor prevailing in July, 1923.

— (COMUNE DI MILANO).—[Ufficio Statistica.] *Annuario storico-statistico, 1920 e 1921.* Milan, October, 1924. [Various paging.]

The delayed thirty-seventh issue of the historical-statistical yearbook of the commune of Milan, covering the years 1920 and 1921. Of interest to labor are the data on housing, immigration and emigration, cost of living, prices, employment offices, unemployment, industrial accidents, arbitration courts, factory inspection, social insurance, cooperative societies, and employers' and workers' organizations.

NETHERLANDS.—Departement van Arbeid, Handel en Nijverheid. *Centraal verslag der arbeidsinspectie in het Koninkrijk der Nederlanden over 1923.* The Hague, 1924. [Various paging.]

Annual report of the factory inspection service of the Netherlands for the year 1923 on its various activities.

— [Ministerie van Binnenlandsche Zaken en Landbouw.] *Centraal Bureau voor de Statistiek. Jaarcijfers voor Nederland, 1923/1924.* The Hague, 1925. lii, 331 pp.

The official statistical yearbook of the Netherlands for the years 1923 and 1924. Of special interest to labor are the statistics on the occupational census, factory inspection, labor disputes, employment exchanges, wages and hours of labor, unemployment, collective agreements, labor organizations, prices, cost of living, and cooperative societies.

— (THE HAGUE).—Statistisch Bureau. *Uitkomsten van een onderzoek naar de kosten van het levensonderhoud van 28 gezinnen te 's-Gravenhage in 1921 en 1922, met berekening van de driemaandelijksche, wijzigingen dier kosten tot en met September 1924 op den grondslag der uitgaven in 1921.* The Hague, 1924. vii, 55 pp.

The results of an investigation made by the municipal statistical office of The Hague into the cost of living for 1921 and 1922 of 28 families residing in that

city, and of a computation of the quarterly changes in this cost up to September, 1924, on the basis of the expenditures in 1921.

POLAND (WARSAW).—*Rocznik Statystyczny Warszawy, 1921 i 1922. Warsaw, 1924. xii, 265 pp.*

Municipal statistics of Warsaw for 1921 and 1922, including housing, prices and cost of living, wages, and strikes.

SWEDEN.—Socialdepartementet. Pensionsstyrelsen. *Allmänna pensionsförsäkringen år 1923. Trollhättan, 1924. 22 pp.*

Report on operations of Swedish pension insurance law in 1923. Contains a résumé in French.

Unofficial

ÅHLANDER, FR. E. *Förteckning över viktigare litteratur rörande arbetarrörelsen och arbetarfrågan, tryckt i Sverige år 1923. Stockholm, 1925. 19 pp. Bilaga till Fackföreningsrörelsen, 1925.*

A list of the more important literature concerning the labor movement and the labor problem printed in Sweden in 1923. This is the first issue, and the publication states that it is the intention to issue this list annually in the future.

AMERICAN ECONOMIC ASSOCIATION. *Papers and proceedings of the thirty-seventh annual meeting, Chicago, Ill., December, 1924. St. Albans, Vt., 1925. 165 pp. Supplement to American Economic Review, Vol. XV, No. 1, March, 1925.*

The papers relating to labor presented at the thirty-seventh annual meeting of the American Economic Association deal with "competitive exchange" as a method of interesting workmen in output and costs, labor supply and labor effort, and intelligence test ratings of occupational groups.

AMERICAN FEDERATION OF LABOR. Illinois branch. *Proceedings of the forty-second annual convention, Peoria, Ill., September 8-13, 1924. Chicago, [1924?]. 440, [10] pp.*

A summary of the report of the bureau of cooperative societies of the federation is given on pages 208 to 210 of this issue of the MONTHLY LABOR REVIEW.

AMERICAN MANAGEMENT ASSOCIATION. *Cost-finding for personnel activities. Report by a subcommittee of the Associated Industries of Massachusetts. New York, 20 Vesey Street, 1925. 12 pp.*

The study covered the personnel work of 90 firms in Massachusetts. The average total cost of these activities for these firms was $1\frac{1}{2}$ per cent of the pay roll but the amount spent depended somewhat upon the size of the firm, the large establishments spending proportionately more than those employing less than 500 workers. It was thought that this study might stimulate more uniform accounting practice among firms carrying on organized industrial relations activities.

BARÈS, RENÉ. *Le crédit aux coopératives de consommation et la Banque des Coopératives de France. Paris, Les Presses Universitaires de France, 1924. 146 pp.*

An account of the form, organization, and operation of the Bank of the Cooperative Societies of France, and of the events leading up to its formation as a separate institution.

BRICKLAYERS, MASONS AND PLASTERERS' INTERNATIONAL UNION OF AMERICA. *Proceedings of the ninth biennial and forty-ninth convention, Saratoga Springs, N. Y., September 8 [to 20], 1924. Indianapolis, [1924?]. 256 pp.*

BROOKINGS, ROBERT S. *Industrial ownership—its economic and social significance. New York, Macmillan Co., 1925. x, 107 pp.*

A discussion of the changing methods in industry from the time half a century ago when ownership and management were synonymous through the period of the trusts to the present, when management has been separated from ownership

through the widespread purchase of stock of large corporations by people of small means. This diffusion of ownership, the writer states, has brought a labor-public problem in place of a capital-labor problem, and the problem of continued improvement in the living conditions of the workers is not redistribution of present production but of increased production per capita. The writer considers that the modification of the restrictive provisions of the anti-trust laws, in order to allow greater cooperation of industry in such lines as research, stabilization of industry, etc., and the elimination of restrictive practices of trade-unions and individual workers are necessary to the securing of a fuller measure of efficiency and that to accomplish this purpose there must be developed a constructive, cooperative policy on the part of labor, the public, and the management of industry. The appendixes contain statistics of the growth in consumers' ownership and a comparison of the earnings of investments in industry and banking.

BUXTON, L. H. DUDLEY. *Primitive labor*. London, Methuen & Co. (Ltd.), 1924. viii, 272 pp.

The specialization of labor of primitive peoples, the influence of climate and locality in the development of primitive industry, and present conditions among inhabitants of the still uncivilized sections of the world are considered in relation to the physical effect which the development of labor has had upon man.

CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING. *Nineteenth annual report [for the year ending June 30, 1924]*. New York, 522 Fifth Avenue, 1924. vii, 236 pp.

The report contains a section on pension legislation and pension systems including teachers' retirement in the United States and in England, governmental pensions in Australia, New South Wales, and Argentina, pensions in industry, and old-age pensions in the United States.

CLEVELAND CHAMBER OF COMMERCE. *A survey of personnel activities in one hundred and eleven Cleveland concerns. A joint report of the committee on labor relations and employment managers' group*. Cleveland, 1925. 23 pp.

This study, covering the personnel work of 111 concerns in the city of Cleveland, was made for the purpose of determining the extent to which certain kinds of personnel work is being carried on and how often these activities have been started and discontinued, and to prepare the way for a more thorough study of those activities which are shown by the study to be worth further investigation. The study showed that employment offices, dispensary service, recreational associations, and pensions once established were generally regarded as indispensable; savings clubs, insurance and sick benefits, cafeterias, and certain forms of recreation were seldom discontinued, although baseball had been given up in 20 per cent of the firms reporting. Bands and orchestras, company stores, buying clubs, and house organs, on the other hand, have proved short lived in so many cases that "their actual value may be questioned."

COLUMBIA UNIVERSITY. *Studies in history, economics and public law, Vol. CXVI, No. 2: Protective labor legislation, with special reference to women in the State of New York, by Elizabeth Faulkner Baker*. New York, 1925. 467 pp.

The specific study indicated is prefaced by a chapter on protective labor legislation as reviewed by the courts, covering the United States, including legislation for all adults as well as that specifically for women. The influences bearing upon legislation for women in New York State and the circumstances attendant upon its enactment receive full discussion, including legislative incidents, evidence adduced at hearings, etc. Chapters on enforcement, the effects of protective legislation, and the controversy now raging between opposing schools conclude the volume. Effects are found to vary according as women are or are not a dominant or at least an important factor in the industry. When they predomi-

nate, protective laws for women are beneficial to both sexes; but if they are in the minority, or can be readily dispensed with, protective legislation tends to exclude them from all opportunity for employment. It is on these results that the opponents of protective legislation stand. Women who have succeeded by superior skill in detaching themselves from the mass chafe under the restraints that protective legislation entails. On the other hand is the hazard to health where the unrestrained desire for gain is left to operate on the masses in which two important groups stand out—one of young women transients in industry and the other of married women who must carry a double burden of home making and of industry. The question is too complex for summary disposal, but "what may be said at this time is that no person, socially minded and intelligent, would stress economic advancement at the expense of health, either for men or for women."

GASSER, ELSA F. *Preise, Lebenskosten, Löhne im Jahre 1924*. Zurich, 1925. 38 pp. Separatabdruck aus der Neuen Zürcher Zeitung, Nrn. 98, 182, 194, Januar/Februar 1925.

A brief review of the movement of prices, cost of living, and wages during the year 1924, in Switzerland, Great Britain, France, Germany, Italy, and the United States.

— *Produktion und Arbeitsmarkt im Jahre 1924*. Zurich, 1925. 20 pp. Separatabdruck aus der Neuen Zürcher Zeitung, Nrn. 106, 149, Januar 1925.

Brief review of the movement of production and the labor market during the year 1924 in Switzerland, Great Britain, France, Germany, and the United States.

INTERNATIONAL TRANSPORT WORKERS' FEDERATION. *Report of the international congress held from August 7 to 12, 1924, in Hamburg*. Amsterdam, 1924. 157 pp.

LOUIS, PAUL. *Le syndicalisme Français d'Amiens à Saint-Étienne (1906-1922)*. Paris, Alcan, 108 Boulevard Saint Germain, 1924. 233 pp.

A history of French syndicalism from the congress of the Confédération Générale du Travail at Amiens in 1906 to that of the Confédération Générale du Travail Unitaire at Saint-Étienne in 1922. This latter congress was called in June, 1922, by the C. G. T. U., the extremist group which had seceded from the C. G. T. in December, 1921, over the question of adherence to the Moscow International.

MINNESOTA, UNIVERSITY OF. College of Agriculture. Extension Division. *Special Bulletin No. 88: Cooperative central marketing organization*, by John D. Black and H. Bruce Price. St. Paul, April, 1924. 15 pp.

A study of methods used by two types of central cooperative marketing organization—"federated" and "centralized"—in handling such problems of marketing as control of quality; standardizing production; adjusting production to consumption; stabilizing production; controlling consumption to fit production; controlling the flow to market; distributing and inspecting the product; selling; bargaining and price policy; financing; elimination of competitive wastes; improvement of business practice; pooling, etc.

NATIONAL INDUSTRIAL CONFERENCE BOARD (INC.). *Special report No. 32: The growth of works councils in the United States*. New York, 247 Park Avenue, 1925. v. 15 pp.

A statistical summary, giving data as to number of works' councils in operation, number established and abandoned during specified periods, nature of industry in which established, cause of failure where plans have been given up, and the like.

OFFICE COOPÉRATIF BELGE. *Cooperative Belgium*. Brussels, 1924. 128 pp., illustrated.

A report presented by the Belgian Cooperative Union to the eleventh congress of the International Cooperative Alliance at Ghent. Traces the growth, up to 1922, of the cooperative movement in all its phases, in relation to the economic, political, and industrial condition of the country. Also contains sketches of the lives and achievements of the cooperative leaders in the important cooperative countries of Europe.

OPERA NAZIONALE DEL DOPOLAVORO. *Il Dopolavoro*. Quaderni del Dopolavoro, No. 1. Rome, [1925?]. 46 pp.

Under the name "Dopolavoro" there has arisen in Italy since the war a movement which has as its object the suitable utilization of the spare time of workers for their social, intellectual, and physical uplift. Sponsored by the Fascist corporations this movement, at first scattered, has crystallized into a centralized, well-organized movement under a central organization called the Opera Nazionale del Dopolavoro with headquarters at Rome and numerous branches in all Provinces. The above is the first of a number of reports which the central organization expects to publish. It gives the history and the object of the movement.

PLUS GRANDE FAMILLE, LA. Commission d'Éducation. *Les carrières féminines*. Paris, Action Populaire, 51 rue Saint-Didier, 1922. xxii, 119 pp.

A study of the occupations open to women in France and of the education necessary for the various classes of positions.

SECRÉTARIAT DES PAYSANS SUISSES. Publication No. 75: *Vingt-sixième rapport annuel du comité directeur de l'Union suisse des paysans et du Secrétariat des paysans suisses*, 1923. Brougg, 1924. 120 pp.

The twenty-sixth annual report of the managing committee and of the secretariat of the Swiss Farmers' Union on their activities during the year 1923.

SOCIAL AND LABOR CONDITIONS IN SWEDEN. Upsala, 1925. 29 pp.

This publication on social and labor conditions in Sweden is reprinted from the Sweden Yearbook, 1925, and covers protection of workers, social insurance, the care of the poor and of children, the labor market, relations between workers and employers, cost of living and wages, the housing problem, and cooperative societies.

TROMBERT, ALBERT. *La participation aux bénéfices*. Paris, Chaix, 20 rue Bergère, 1924. xv, 442 pp.

A guide to the practical application of profit sharing, giving detailed information of systems in effect in France and other countries.

UNITED TYPOTHETÆ OF AMERICA. Industrial Bureau. Department of Research. *Changes in union wage scales in the book and job printing industry, 1914 to 1924*. Chicago, 600 West Jackson Boulevard, October, 1924. 23 pp.

Compiled primarily for the use of the members of the Typothetæ who have contractual relations with the unions, "to meet their need for data on changes in wages during the past 10 years in their own and other cities for use in wage negotiations and arbitration cases."

